

# FEDERAL OPERATING PERMIT

A FEDERAL OPERATING PERMIT IS HEREBY ISSUED TO  
The Dow Chemical Company

AUTHORIZING THE OPERATION OF  
Dow Texas Operations - Freeport  
Propane Dehydrogenation Unit  
Industrial Organic Chemicals

LOCATED AT  
Brazoria County, Texas  
Latitude 28° 59' 27" Longitude 95° 24' 26"  
Regulated Entity Number: RN100225945

This permit is issued in accordance with and subject to the Texas Clean Air Act (TCAA), Chapter 382 of the Texas Health and Safety Code and Title 30 Texas Administrative Code Chapter 122 (30 TAC Chapter 122), Federal Operating Permits. Under 30 TAC Chapter 122, this permit constitutes the permit holder's authority to operate the site and emission units listed in this permit. Operations of the site and emission units listed in this permit are subject to all additional rules or amended rules and orders of the Commission pursuant to the TCAA.

This permit does not relieve the permit holder from the responsibility of obtaining New Source Review authorization for new, modified, or existing facilities in accordance with 30 TAC Chapter 116, Control of Air Pollution by Permits for New Construction or Modification.

The site and emission units authorized by this permit shall be operated in accordance with 30 TAC Chapter 122, the general terms and conditions, special terms and conditions, and attachments contained herein.

This permit shall expire five years from the date of issuance. The renewal requirements specified in 30 TAC § 122.241 must be satisfied in order to renew the authorization to operate the site and emission units.

Permit No: 03777 Issuance Date: \_\_\_\_\_

---

For the Commission

## Table of Contents

Section	Page
General Terms and Conditions .....	1
Special Terms and Conditions: .....	1
Emission Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting.....	1
Additional Monitoring Requirements .....	10
New Source Review Authorization Requirements.....	10
Compliance Requirements .....	11
Risk Management Plan .....	12
Temporary Fuel Shortages (30 TAC § 112.15).....	13
Alternative Requirements.....	13
Permit Location.....	13
Permit Shield (30 TAC § 122.148) .....	13
Attachments.....	14
Applicable Requirements Summary.....	15
Additional Monitoring Requirements .....	119
Permit Shield .....	134
New Source Review Authorization References .....	145
Alternative Requirement.....	152
Appendix A .....	165
Acronym List .....	166
Appendix B .....	167

## **General Terms and Conditions**

The permit holder shall comply with all terms and conditions contained in 30 TAC § 122.143 (General Terms and Conditions), 30 TAC § 122.144 (Recordkeeping Terms and Conditions), 30 TAC § 122.145 (Reporting Terms and Conditions), and 30 TAC § 122.146 (Compliance Certification Terms and Conditions).

In accordance with 30 TAC § 122.144(1), records of required monitoring data and support information required by this permit, or any applicable requirement codified in this permit, are required to be maintained for a period of five years from the date of the monitoring report, sample, or application unless a longer data retention period is specified in an applicable requirement. The five year record retention period supersedes any less stringent retention requirement that may be specified in a condition of a permit identified in the New Source Review Authorization attachment.

If the permit holder chooses to demonstrate that this permit is no longer required, a written request to void this permit shall be submitted to the Texas Commission on Environmental Quality (TCEQ) by the Responsible Official in accordance with 30 TAC § 122.161(e). The permit holder shall comply with the permit's requirements, including compliance certification and deviation reporting, until notified by the TCEQ that this permit is voided.

The permit holder shall comply with 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit.

All reports required by this permit must include in the submittal a cover letter which identifies the following information: company name, TCEQ regulated entity number, air account number (if assigned), site name, area name (if applicable), and Air Permits Division permit number(s).

## **Special Terms and Conditions:**

### **Emission Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting**

1. Permit holder shall comply with the following requirements:
  - A. Emission units (including groups and processes) in the Applicable Requirements Summary attachment shall meet the limitations, standards, equipment specifications, monitoring, recordkeeping, reporting, testing, and other requirements listed in the Applicable Requirements Summary attachment to assure compliance with the permit.
  - B. The textual description in the column titled "Textual Description" in the Applicable Requirements Summary attachment is not enforceable and is not deemed as a substitute for the actual regulatory language. The Textual Description is provided for information purposes only.
  - C. A citation listed on the Applicable Requirements Summary attachment, which has a notation [G] listed before it, shall include the referenced section and subsection for all commission rules, or paragraphs for all federal and state regulations and all subordinate paragraphs, subparagraphs and clauses, subclauses, and items contained within the referenced citation as applicable requirements.

- D. When a grouped citation, notated with a [G] in the Applicable Requirements Summary, contains multiple compliance options, the permit holder must keep records of when each compliance option was used.
- E. Emission units subject to 40 CFR Part 63, Subpart H and Subpart FFFF as identified in the attached Applicable Requirements Summary table are subject to 30 TAC Chapter 113, Subchapter C, §113.130 and §113.890 which incorporates the 40 CFR Part 63 Subpart by reference.
- F. For the purpose of generating emission reduction credits through 30 TAC Chapter 101, Subchapter H, Division 1 (Emission Credit Banking and Trading), the permit holder shall comply with the following requirements:
  - (i) Title 30 TAC § 101.302 (relating to General Provisions)
  - (ii) Title 30 TAC § 101.303 (relating to Emission Reduction Credit Generation Certification)
  - (iii) Title 30 TAC § 101.304 (relating to Mobile Emission Reduction Credit Generation and Certification)
  - (iv) Title 30 TAC § 101.309 (relating to Emission Credit Banking and Trading)
  - (v) The terms and conditions by which the emission limits are established to generate the reduction credit are applicable requirements of this permit
- G. The permit holder shall comply with the following 30 TAC Chapter 101, Subchapter H, Division 3 (Mass Emission Cap and Trade Program) Requirements:
  - (i) Title 30 TAC § 101.352 (relating to General Provisions)
  - (ii) Title 30 TAC § 101.353 (relating to Allocation of Allowances)
  - (iii) Title 30 TAC § 101.354 (relating to Allowance Deductions)
  - (iv) Title 30 TAC § 101.356 (relating to Allowance Banking and Trading)
  - (v) Title 30 TAC § 101.358 (relating to Emission Monitoring and Compliance Demonstration)
  - (vi) Title 30 TAC § 101.359 (relating to Reporting)
  - (vii) Title 30 TAC § 101.360 (relating to Level of Activity Certification)
  - (viii) The terms and conditions by which the emission limits are established to meet or exceed the cap are applicable requirements of this permit
- H. For the purpose of generating discrete emission reduction credits through 30 TAC Chapter 101, Subchapter H, Division 4 (Discrete Emission Credit Banking and Trading), the permit holder shall comply with the following requirements:
  - (i) Title 30 TAC § 101.372 (relating to General Provisions)

- (ii) Title 30 TAC § 101.373 (relating to Discrete Emission Reduction Credit Generation and Certification)
  - (iii) Title 30 TAC § 101.374 (relating to Mobile Discrete Emission Reduction Credit Generation and Certification)
  - (iv) Title 30 TAC § 101.378 (relating to Discrete Emission Credit Banking and Trading)
  - (v) The terms and conditions by which the emission limits are established to generate the discrete reduction credit are applicable requirements of this permit
- I. The permit holder shall comply with the following 30 TAC Chapter 101, Subchapter H, Division 6 (Highly Reactive Volatile Organic Compound Emissions Cap and Trade Program) requirements:
  - (i) Title 30 TAC § 101.392 (relating to Exemptions)
  - (ii) Title 30 TAC § 101.401 (relating to Level of Activity Certification)
- 2. The permit holder shall comply with the following sections of 30 TAC Chapter 101 (General Air Quality Rules):
  - A. Title 30 TAC § 101.1 (relating to Definitions), insofar as the terms defined in this section are used to define the terms used in other applicable requirements
  - B. Title 30 TAC § 101.3 (relating to Circumvention)
  - C. Title 30 TAC § 101.8 (relating to Sampling), if such action has been requested by the TCEQ
  - D. Title 30 TAC § 101.9 (relating to Sampling Ports), if such action has been requested by the TCEQ
  - E. Title 30 TAC § 101.10 (relating to Emissions Inventory Requirements)
  - F. Title 30 TAC § 101.201 (relating to Emission Event Reporting and Recordkeeping Requirements)
  - G. Title 30 TAC § 101.211 (relating to Scheduled Maintenance, Start-up, and Shutdown Reporting and Recordkeeping Requirements)
  - H. Title 30 TAC § 101.221 (relating to Operational Requirements)
  - I. Title 30 TAC § 101.222 (relating to Demonstrations)
  - J. Title 30 TAC § 101.223 (relating to Actions to Reduce Excessive Emissions)
- 3. Permit holder shall comply with the following requirements of 30 TAC Chapter 111:
  - A. For visible emissions from all other sources not specified in 30 TAC § 111.111(a)(1), (4), or (7); the permit holder shall comply with the following requirements:

- (i) Title 30 TAC § 111.111(a)(8)(A) (relating to Requirements for Specified Sources)
- (ii) Title 30 TAC § 111.111(a)(8)(B)(i) or (ii)
- (iii) For a source subject to 30 TAC § 111.111(a)(8)(A), complying with 30 TAC § 111.111(a)(8)(B)(i) or (ii), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO<sub>x</sub>, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146:
  - (1) An observation of visible emissions from a source which is required to comply with 30 TAC § 111.111(a)(8)(A) shall be conducted at least once during each calendar quarter unless the source is not operating for the entire quarter.
  - (2) Records of all observations shall be maintained.
  - (3) Visible emissions observations of sources operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of sources operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions shall be determined with each source in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each source during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.
  - (4) Compliance Certification:
    - (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(8) and (a)(8)(A)
    - (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(8)(B) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the

source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.

- B. Certification of opacity readers determining opacities under Method 9 (as outlined in 40 CFR Part 60, Appendix A) to comply with opacity monitoring requirements shall be accomplished by completing the Visible Emissions Evaluators Course, or approved agency equivalent, no more than 180 days before the opacity reading.
- C. For emission units with contributions from uncombined water, the permit holder shall comply with the requirements of 30 TAC § 111.111(b).
- D. Emission limits on nonagricultural processes, except for the steam generators specified in 30 TAC § 111.153, shall comply with the following requirements:
  - (i) Emissions of PM from any source may not exceed the allowable rates as required in 30 TAC § 111.151(a) (relating to Allowable Emissions Limits)
  - (ii) Sources with an effective stack height ( $h_e$ ) less than the standard effective stack height ( $H_e$ ), must reduce the allowable emission level by multiplying it by  $[h_e/H_e]^2$  as required in 30 TAC § 111.151(b)
  - (iii) Effective stack height shall be calculated by the equation specified in 30 TAC § 111.151(c)
- 4. For storage vessels maintaining working pressure as specified in 30 TAC Chapter 115, Subchapter B, Division 1: Storage of Volatile Organic Compounds, the permit holder shall comply with the requirements of 30 TAC § 115.112(e)(1).
- 5. The permit holder shall comply with the following requirements of 30 TAC Chapter 115, Subchapter F, Division 3, Degassing of Storage Tanks, Transport Vessels and Marine Vessels:
  - A. For degassing of stationary VOC storage tanks, the permit holder shall comply with the following requirements:
    - (i) Title 30 TAC § 115.541(a) - (c) (relating to Emission Specifications)
    - (ii) Title 30 TAC § 115.541(f) (relating to Emission Specifications), for floating roof storage tanks
    - (iii) Title 30 TAC § 115.542(a) and (a)(1), (a)(2), (a)(3) or (a)(4) (relating to Control Requirements). Where the requirements of 30 TAC Chapter 115, Subchapter F contain multiple compliance options, the permit holder shall keep records of when each compliance option was used.
    - (iv) Title 30 TAC § 115.542(b) - (d), (relating to Control Requirements)

- (v) Title 30 TAC § 115.543 (relating to Alternate Control Requirements)
- (vi) Title 30 TAC § 115.544(a)(1) and (a)(2) (relating to Inspection, Monitoring, and Testing Requirements), for inspections
- (vii) Title 30 TAC § 115.544(b) (relating to Inspection, Monitoring, and Testing Requirements), for monitoring
- (viii) Title 30 TAC § 115.544(b)(1) and (b)(2) (relating to Inspection, Monitoring, and Testing Requirements), for monitoring of control devices
- (ix) Title 30 TAC § 115.544(b)(2)(A) - (J) (relating to Inspection, Monitoring, and Testing Requirements), for monitoring (as appropriate to the control device)
- (x) Title 30 TAC § 115.544(b)(3), (b)(4) and (b)(6) (relating to Inspection, Monitoring, and Testing Requirements), for VOC concentration or lower explosive limit threshold monitoring
- (xi) Title 30 TAC § 115.544(c), and (c)(1) - (c)(3) (relating to Inspection, Monitoring, and Testing Requirements), for testing of control devices used to comply with 30 TAC § 115.542(a)(1)
- (xii) Title 30 TAC § 115.545(1) - (7), (9) - (11) and (13) (relating to Approved Test Methods)
- (xiii) Title 30 TAC § 115.546(a), (a)(1) and (a)(3) (relating to Recordkeeping and Notification Requirements), for recordkeeping
- (xiv) Title 30 TAC § 115.546(a)(2) and (a)(2)(A) - (J) (relating to Recordkeeping and Notification Requirements), for recordkeeping (as appropriate to the control device)
- (xv) Title 30 TAC § 115.546(a)(4) (relating to Recordkeeping and Notification Requirements), for recordkeeping of testing of control devices used to comply with 30 TAC § 115.542(a)(1)
- (xvi) Title 30 TAC § 115.546(b) (relating to Recordkeeping and Notification Requirements), for notification
- (xvii) Title 30 TAC § 115.547(4) (relating to Exemptions)

6. The permit holder shall comply with the following requirements of 30 TAC Chapter 115, Subchapter H, Division 1 for pressure relief devices not controlled by a flare:

- A. Title 30 TAC § 115.725(c)
- B. Title 30 TAC § 115.725(c)(1), (c)(1)(A) - (C)
- C. Title 30 TAC § 115.725(c)(2)
- D. Title 30 TAC § 115.725(c)(3), (c)(3)(A) - (E)
- E. Title 30 TAC § 115.725(c)(4)



- F. Title 30 TAC § 115.725(l)
- G. Title 30 TAC § 115.726(c), (c)(1) - (4)
- 7. The permit holder shall comply with the requirements of 30 TAC § 115.726(e)(3)(A) for vent streams having no potential to emit HRVOC.
- 8. The permit holder shall comply with the requirements of 30 TAC § 115.726(e)(3)(A) for vent streams from sources exempt under 30 TAC § 115.727(c)(3).
- 9. The permit holder shall comply with the following requirements for units subject to any subpart of 40 CFR Part 60, unless otherwise stated in the applicable subpart:
  - A. Title 40 CFR § 60.7 (relating to Notification and Recordkeeping)
  - B. Title 40 CFR § 60.8 (relating to Performance Tests)
  - C. Title 40 CFR § 60.11 (relating to Compliance with Standards and Maintenance Requirements)
  - D. Title 40 CFR § 60.12 (relating to Circumvention)
  - E. Title 40 CFR § 60.13 (relating to Monitoring Requirements)
  - F. Title 40 CFR § 60.14 (relating to Modification)
  - G. Title 40 CFR § 60.15 (relating to Reconstruction)
  - H. Title 40 CFR § 60.19 (relating to General Notification and Reporting Requirements)
- 10. The permit holder shall comply with the following requirements for units subject to any subpart of 40 CFR Part 61, unless otherwise stated in the applicable subpart:
  - A. Title 40 CFR § 61.05 (relating to Prohibited Activities)
  - B. Title 40 CFR § 61.07 (relating to Application for Approval of Construction or Modification)
  - C. Title 40 CFR § 61.09 (relating to Notification of Start-up)
  - D. Title 40 CFR § 61.10 (relating to Source Reporting and Request Waiver)
  - E. Title 40 CFR § 61.12 (relating to Compliance with Standards and Maintenance Requirements)
  - F. Title 40 CFR § 61.13 (relating to Emissions Tests and Waiver of Emission Tests)
  - G. Title 40 CFR § 61.14 (relating to Monitoring Requirements)
  - H. Title 40 CFR § 61.15 (relating to Modification)
  - I. Title 40 CFR § 61.19 (relating to Circumvention)

11. For facilities where total annual benzene quantity from waste is greater than or equal to 10 megagrams per year and subject to emission standards in 40 CFR Part 61, Subpart FF, the permit holder shall comply with the following requirements:
  - A. Title 40 CFR § 61.342(c)(1)(i) - (iii) (relating to Standards: General)
  - B. Title 40 CFR § 61.342(c)(2) (relating to Standards: General)
  - C. Title 40 CFR § 61.342(f)(1), and (2) (relating to Standards: General)
  - D. Title 40 CFR § 61.342(g) (relating to Standards: General)
  - E. Title 40 CFR § 61.350(a) and (b) (relating to Standards: Delay of Repair)
  - F. Title 40 CFR § 61.355(a)(1)(iii), (a)(2), (a)(6), (b), and (c)(1) - (3) (relating to Test Methods, Procedures, and Compliance Provisions)
  - G. Title 40 CFR § 61.356(a) (relating to Recordkeeping Requirements)
  - H. Title 40 CFR § 61.356(b), and (b)(1) (relating to Recordkeeping Requirements)
  - I. Title 40 CFR § 61.356(b)(5) (relating to Recordkeeping Requirements)
  - J. Title 40 CFR § 61.356(c) (relating to Recordkeeping Requirements)
  - K. Title 40 CFR § 61.357(a), (d)(1), (d)(2) (d)(6) and (d)(8) (relating to Reporting Requirements)
12. For facilities with containers subject to emission standards in 40 CFR Part 61, Subpart FF, the permit holder shall comply with the following requirements:
  - A. Title 40 CFR § 61.345(a)(1) - (3), (b), and (c) (relating to Standards: Containers)
  - B. Title 40 CFR § 61.355(h) (relating to Test Methods, Procedures and Compliance Provisions)
  - C. Title 40 CFR § 61.356(g) (relating to Recordkeeping Requirements)
  - D. Title 40 CFR § 61.356(h) (relating to Recordkeeping Requirements)
13. The permit holder shall comply with the requirements of 30 TAC Chapter 113, Subchapter C, § 113.100 for units subject to any subpart of 40 CFR Part 63, unless otherwise stated in the applicable subpart.
14. For miscellaneous chemical process facilities subject to maintenance wastewater requirements as specified in 40 CFR § 63.2485, Table 7, the permit holder shall comply with the requirements of 40 CFR § 63.105 (relating to Maintenance Wastewater Requirements) (Title 30 TAC Chapter 113, Subchapter C, § 113.890 incorporated by reference).
15. For miscellaneous chemical process facilities with Group 2 wastewater streams subject to wastewater operations requirements in 40 CFR Part 63, Subpart FFFF, the permit holder shall comply with the requirements of 40 CFR § 63.132(a), (a)(1), (a)(1)(i), and

(a)(3) as specified in § 63.2485(a) (Title 30 TAC Chapter 113, Subchapter C, § 113.890 incorporated by reference).

16. For the transfer of site remediation materials subject to 40 CFR Part 63, Subpart GGGGG off-site to another facility, the permit holder shall comply with the following requirements (Title 30 TAC, Subchapter C, § 113.1160 incorporated by reference):
  - A. Title 40 CFR § 63.7936(a), for the transfer of site remediation materials
  - B. Title 40 CFR § 63.7936(b)(1), for transfer to a landfill or land disposal unit
  - C. Title 40 CFR § 63.7936(b)(2), for transfer to a facility subject to 40 CFR Part 63, Subpart DD
  - D. Title 40 CFR § 63.7936(b)(3), (b)(3)(i) - (iv), for transfer to a facility managing the site remediation material according to the requirements of 40 CFR Part 63, Subpart GGGGG
17. For containers managing remediation materials subject to 40 CFR Part 63, Subpart GGGGG, the permit holder shall comply with the following requirements (Title 30 TAC Chapter 113, Subchapter C, § 113.1160 incorporated by reference):
  - A. Title 40 CFR § 63.922(b)(1) - (3), (c), (d), (d)(1) - (5), (e), and (f), (f)(1) - (4) (relating to Standards - Container Level 1 Controls)
  - B. Title 40 CFR § 63.923(b)(1) - (3), (c), (d), (d)(1) - (5), (e), and (f), (f)(1) - (4) (relating to Standards - Container Level 2 Controls)
  - C. Title 40 CFR § 63.925(a)(1) - (8), and (b)(1) - (3) (relating to Test Methods and Procedures)
  - D. Title 40 CFR § 63.926(a)(1) - (3) (relating to Inspection and Monitoring Requirements)
  - E. Title 40 CFR § 63.7901(b) and (b)(1), for initial demonstration of compliance
  - F. Title 40 CFR § 63.7901(b)(2), for initial demonstration of compliance
  - G. Title 40 CFR § 63.7901(c), (c)(1), and (c)(2), for initial demonstration of compliance
  - H. Title 40 CFR § 63.7901(d), and (d)(1) - (4), for initial demonstration of compliance
  - I. Title 40 CFR § 63.7903(b) and (b)(1), for continuous demonstration of compliance
  - J. Title 40 CFR § 63.7903(b)(2), (b)(2)(i), (b)(2)(ii), for continuous demonstration of compliance
  - K. Title 40 CFR § 63.7903(c)(4), (c)(4)(i), and (c)(4)(ii), for continuous demonstration of compliance
  - L. Title 40 CFR § 63.7903(d)(5), (d)(5)(i), and (d)(5)(ii), for continuous demonstration of compliance

- M. Title 40 CFR § 63.7952(c), for recordkeeping

#### **Additional Monitoring Requirements**

18. The permit holder shall comply with the periodic monitoring requirements as specified in the attached "Periodic Monitoring Summary" upon issuance of the permit. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permit holder shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time specified in the "Periodic Monitoring Summary," for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances to avoid reporting deviations. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).

#### **New Source Review Authorization Requirements**

19. Permit holder shall comply with the requirements of New Source Review authorizations issued or claimed by the permit holder for the permitted area, including permits, permits by rule, standard permits, flexible permits, special permits, permits for existing facilities including Voluntary Emissions Reduction Permits and Electric Generating Facility Permits issued under 30 TAC Chapter 116, Subchapter I, or special exemptions referenced in the New Source Review Authorization References attachment. These requirements:
- A. Are incorporated by reference into this permit as applicable requirements
  - B. Shall be located with this operating permit
  - C. Are not eligible for a permit shield
20. The permit holder shall comply with the general requirements of 30 TAC Chapter 106, Subchapter A or the general requirements, if any, in effect at the time of the claim of any PBR.
21. The permit holder shall maintain records to demonstrate compliance with any emission limitation or standard that is specified in a permit by rule (PBR) or Standard Permit listed in the New Source Review Authorizations attachment. The records shall yield reliable data from the relevant time period that are representative of the emission unit's compliance with the PBR or Standard Permit. These records may include, but are not limited to, production capacity and throughput, hours of operation, safety data sheets (SDS), chemical composition of raw materials, speciation of air contaminant data, engineering calculations, maintenance records, fugitive data, performance tests, capture/control device efficiencies, direct pollutant monitoring (CEMS, COMS, or PEMS), or control device parametric monitoring. These records shall be made readily accessible and available as required by 30 TAC § 122.144. Any monitoring or recordkeeping data indicating noncompliance with the PBR or Standard Permit shall be considered and reported as a deviation according to 30 TAC § 122.145 (Reporting Terms and Conditions).

## Compliance Requirements

22. The permit holder shall certify compliance in accordance with 30 TAC § 122.146. The permit holder shall comply with 30 TAC § 122.146 using at a minimum, but not limited to, the continuous or intermittent compliance method data from monitoring, recordkeeping, reporting, or testing required by the permit and any other credible evidence or information. The certification period may not exceed 12 months and the certification must be submitted within 30 days after the end of the period being certified.
23. Permit holder shall comply with the following 30 TAC Chapter 117 requirements:
  - A. The permit holder shall comply with the compliance schedules and submit written notification to the TCEQ Executive Director as required in 30 TAC Chapter 117, Subchapter H, Division 1:
    - (i) For sources in the Houston-Galveston-Brazoria Nonattainment area, 30 TAC § 117.9020:
      - (1) Title 30 TAC § 117.9020(2)(A), (C), and (D)
  - B. The permit holder shall comply with the Initial Control Plan unit listing requirement in 30 TAC § 117.350(c) and (c)(1).
  - C. The permit holder shall comply with the requirements of 30 TAC § 117.354 for Final Control Plan Procedures for Attainment Demonstration Emission Specifications and 30 TAC § 117.356 for Revision of Final Control Plan.
24. Use of Emission Credits to comply with applicable requirements:
  - A. Unless otherwise prohibited, the permit holder may use emission credits to comply with the following applicable requirements listed elsewhere in this permit:
    - (i) Title 30 TAC Chapter 115
    - (ii) Title 30 TAC Chapter 117
    - (iii) Offsets for Title 30 TAC Chapter 116
  - B. The permit holder shall comply with the following requirements in order to use the emission credits to comply with the applicable requirements:
    - (i) The permit holder must notify the TCEQ according to 30 TAC § 101.306(c)-(d)
    - (ii) The emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 1
    - (iii) The executive director has approved the use of the credit according to 30 TAC § 101.306(c)-(d)

- (iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.302(g) and 30 TAC Chapter 122
  - (v) Title 30 TAC § 101.305 (relating to Emission Reductions Achieved Outside the United States)
- 25. Use of Discrete Emission Credits to comply with the applicable requirements:
  - A. Unless otherwise prohibited, the permit holder may use discrete emission credits to comply with the following applicable requirements listed elsewhere in this permit:
    - (i) Title 30 TAC Chapter 115
    - (ii) Title 30 TAC Chapter 117
    - (iii) If applicable, offsets for Title 30 TAC Chapter 116
    - (iv) Temporarily exceed state NSR permit allowables
  - B. The permit holder shall comply with the following requirements in order to use the credit to comply with the applicable requirements:
    - (i) The permit holder must notify the TCEQ according to 30 TAC § 101.376(d)
    - (ii) The discrete emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 4
    - (iii) The executive director has approved the use of the discrete emission credits according to 30 TAC § 101.376(d)(1)(A)
    - (iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.372(h) and 30 TAC Chapter 122
    - (v) Title 30 TAC § 101.375 (relating to Emission Reductions Achieved Outside the United States)

## **Risk Management Plan**

- 26. For processes subject to 40 CFR Part 68 and specified in 40 CFR § 68.10, the permit holder shall comply with the requirements of the Accidental Release Prevention Provisions in 40 CFR Part 68. The permit holder shall submit to the appropriate agency either a compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR § 68.10(a), or as part of the compliance certification submitted under this permit, a certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of a risk management plan.

### **Temporary Fuel Shortages (30 TAC § 112.15)**

27. The permit holder shall comply with the following 30 TAC Chapter 112 requirements:
- A. Title 30 TAC § 112.15 (relating to Temporary Fuel Shortage Plan Filing Requirements)
  - B. Title 30 TAC § 112.16(a), (a)(1), and (a)(2)(B) - (C) (relating to Temporary Fuel Shortage Plan Operating Requirements)
  - C. Title 30 TAC § 112.17 (relating to Temporary Fuel Shortage Plan Notification Procedures)
  - D. Title 30 TAC § 112.18 (relating to Temporary Fuel Shortage Plan Reporting Requirements)

### **Alternative Requirements**

28. The permit holder shall comply with the approved alternative means of control (AMOC); alternative monitoring, recordkeeping, or reporting requirements; or requirements determined to be equivalent to an otherwise applicable requirement contained in the Alternative Requirements attachment of this permit. Units complying with an approved alternative requirement have reference to the approval in the Applicable Requirements summary listing for the unit. The permit holder shall maintain the original documentation, from the EPA Administrator and TCEQ Executive Director, demonstrating the method or limitation utilized. Documentation shall be maintained and made available in accordance with 30 TAC § 122.144.

### **Permit Location**

29. The permit holder shall maintain a copy of this permit and records related to requirements listed in this permit on site.

### **Permit Shield (30 TAC § 122.148)**

30. A permit shield is granted for the emission units, groups, or processes specified in the attached "Permit Shield." Compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements listed in the attachment "Permit Shield." Permit shield provisions shall not be modified by the executive director until notification is provided to the permit holder. No later than 90 days after notification of a change in a determination made by the executive director, the permit holder shall apply for the appropriate permit revision to reflect the new determination. Provisional terms are not eligible for this permit shield. Any term or condition, under a permit shield, shall not be protected by the permit shield if it is replaced by a provisional term or condition or the basis of the term and condition changes.

## **Attachments**

**Applicable Requirements Summary**

**Additional Monitoring Requirements**

**Permit Shield**

**New Source Review Authorization References**

**Alternative Requirement**



**Applicable Requirements Summary**

**Unit Summary ..... 16**

**Applicable Requirements Summary ..... 39**

Note: A “none” entry may be noted for some emission sources in this permit’s “Applicable Requirements Summary” under the heading of “Monitoring and Testing Requirements” and/or “Recordkeeping Requirements” and/or “Reporting Requirements.” Such a notation indicates that there are no requirements for the indicated emission source as identified under the respective column heading(s) for the stated portion of the regulation when the emission source is operating under the conditions of the specified SOP Index Number. However, other relevant requirements pursuant to 30 TAC Chapter 122 including Recordkeeping Terms and Conditions (30 TAC § 122.144), Reporting Terms and Conditions (30 TAC § 122.145), and Compliance Certification Terms and Conditions (30 TAC § 122.146) continue to apply.

### Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
OC4PHCT900	INDUSTRIAL PROCESS COOLING TOWERS	N/A	R5760-01	30 TAC Chapter 115, HRVOC Cooling Towers	No changing attributes.
OC4PHCT900	INDUSTRIAL PROCESS COOLING TOWERS	N/A	63FFFF-01	40 CFR Part 63, Subpart FFFF	No changing attributes.
OC4PHDL460	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R1111-01	30 TAC Chapter 111, Visible Emissions	No changing attributes.
OC4PHDU210	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63FFFF-01	40 CFR Part 63, Subpart FFFF	No changing attributes.
OC4PHDU220	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63FFFF-01	40 CFR Part 63, Subpart FFFF	No changing attributes.
OC4PHDU610	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63FFFF-01	40 CFR Part 63, Subpart FFFF	Emission Standard = The TRE index is not maintained above the threshold (5.0 for a new source and 1.9 for an existing source) and a flare is being used for control., Determined Hal = The emission stream is determined to be non-halogenated., Designated Grp1 = The emission stream is designated as Group 1., Negative Pressure = The closed vent system is operated and maintained at or above atmospheric pressure., Designated Hal = The emission stream is not designated as halogenated., Prior Eval = The data from a prior evaluation or assessment is not used., Bypass Line = No bypass

### Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
					lines., Assessment Waiver = The Administrator has granted a waiver of compliance assessment.
OC4PHDU610	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63FFFF-02	40 CFR Part 63, Subpart FFFF	Emission Standard = The TRE index is not maintained above the threshold (5.0 for a new source and 1.9 for an existing source) and a non-flare CD is being used to meet a ppmv standard per § 63.2455(a) - Table 1.1.a.i., Hal Device Type = No halogen scrubber or other halogen reduction device is used., Alt 63SS Mon Parameters = Alternate monitoring parameters or requirements have not been approved by the Administrator or have not been requested., Formaldehyde = The stream does not contain formaldehyde., Bypass Line = No bypass lines., Prior Eval = The data from a prior evaluation or assessment is not used., CEMS = A CEMS is not used., Designated Grp1 = The emission stream is determined to be Group 1., Small Device = A small control device (defined in § 63.2550) is not being used., Designated Hal = The emission stream is not designated as halogenated., Negative Pressure = The closed vent system is operated and maintained at or

### Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
					above atmospheric pressure., SS Device Type = Boiler or process heater with a design heat input capacity equal to or greater than 44 megawatts (MW) or in which all vent streams are introduced with the primary fuel or are used as the primary fuel., Meets 63.988(b)(2) = The control device does not meet the criteria in § 63.985(b)(2)., Determined Hal = The emission stream is determined to be non- halogenated., Assessment Waiver = The Administrator has not granted a waiver of compliance assessment or no waiver is requested.
OC4PHDU620	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63FFFF-01	40 CFR Part 63, Subpart FFFF	Emission Standard = The TRE index is not maintained above the threshold (5.0 for a new source and 1.9 for an existing source) and a flare is being used for control., Determined Hal = The emission stream is determined to be non- halogenated., Designated Grp1 = The emission stream is designated as Group 1., Negative Pressure = The closed vent system is operated and maintained at or above atmospheric pressure., Designated Hal = The emission stream is not designated as halogenated., Prior Eval = The data from a prior evaluation or assessment is not

### Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
					used., Bypass Line = No bypass lines., Assessment Waiver = The Administrator has granted a waiver of compliance assessment.
OC4PHDU620	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63FFFF-02	40 CFR Part 63, Subpart FFFF	Emission Standard = The TRE index is not maintained above the threshold (5.0 for a new source and 1.9 for an existing source) and a non-flare CD is being used to meet a ppmv standard per § 63.2455(a) - Table 1.1.a.i., Hal Device Type = No halogen scrubber or other halogen reduction device is used., Alt 63SS Mon Parameters = Alternate monitoring parameters or requirements have not been approved by the Administrator or have not been requested., Formaldehyde = The stream does not contain formaldehyde., Bypass Line = No bypass lines., Prior Eval = The data from a prior evaluation or assessment is not used., CEMS = A CEMS is not used., Designated Grp1 = The emission stream is determined to be Group 1., Small Device = A small control device (defined in § 63.2550) is not being used., Designated Hal = The emission stream is not designated as halogenated., Negative Pressure = The closed vent system is

### Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
					operated and maintained at or above atmospheric pressure., SS Device Type = Boiler or process heater with a design heat input capacity equal to or greater than 44 megawatts (MW) or in which all vent streams are introduced with the primary fuel or are used as the primary fuel., Meets 63.988(b)(2) = The control device does not meet the criteria in § 63.985(b)(2)., Determined Hal = The emission stream is determined to be non-halogenated., Assessment Waiver = The Administrator has not granted a waiver of compliance assessment or no waiver is requested.
OC4PHDU650	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63FFFF-01	40 CFR Part 63, Subpart FFFF	No changing attributes.
OC4PHF9551	FLARES	N/A	R1111-01	30 TAC Chapter 111, Visible Emissions	No changing attributes.
OC4PHF9551	FLARES	N/A	R5720-01	30 TAC Chapter 115, HRVOC Vent Gas	No changing attributes.
OC4PHF9551	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-01	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
OC4PHF9551	FLARES	N/A	60A-01	40 CFR Part 60, Subpart A	Heating Value of Gas = Heating value is greater than 1000 Btu/scf (37.3 MJ/scm)

### Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
OC4PHF9551	FLARES	N/A	60A-02	40 CFR Part 60, Subpart A	Heating Value of Gas = Heating value is less than or equal to 1000 Btu/scf (37.3 MJ/scm).
OC4PHF9551	FLARES	N/A	63A-01	40 CFR Part 63, Subpart A	Heating Value of Gas = Heating value is less than or equal to 1000 Btu/scf (37.3 MJ/scm).
OC4PHF9551	FLARES	N/A	63A-02	40 CFR Part 63, Subpart A	Heating Value of Gas = Heating value is greater than 1000 Btu/scf (37.3 MJ/scm).
OC4PHF9551	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63FFFF-01	40 CFR Part 63, Subpart FFFF	No changing attributes.
OC4PHF9552	FLARES	N/A	R1111-01	30 TAC Chapter 111, Visible Emissions	No changing attributes.
OC4PHF9552	FLARES	N/A	R5720-01	30 TAC Chapter 115, HRVOC Vent Gas	No changing attributes.
OC4PHF9552	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-01	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
OC4PHF9552	FLARES	N/A	63A-01	40 CFR Part 63, Subpart A	Heating Value of Gas = Heating value is less than or equal to 1000 Btu/scf (37.3 MJ/scm).
OC4PHF9552	FLARES	N/A	63A-02	40 CFR Part 63, Subpart A	Heating Value of Gas = Heating value is greater than 1000 Btu/scf (37.3 MJ/scm).
OC4PHF9552	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63FFFF-01	40 CFR Part 63, Subpart FFFF	No changing attributes.

### Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
OC4PHF956	FLARES	N/A	R1111-01	30 TAC Chapter 111, Visible Emissions	No changing attributes.
OC4PHF956	FLARES	N/A	R5720-01	30 TAC Chapter 115, HRVOC Vent Gas	No changing attributes.
OC4PHF956	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-01	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
OC4PHF956	FLARES	N/A	60A-01	40 CFR Part 60, Subpart A	No changing attributes.
OC4PHF956	FLARES	N/A	63A-01	40 CFR Part 63, Subpart A	No changing attributes.
OC4PHF956	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63FFFF-01	40 CFR Part 63, Subpart FFFF	No changing attributes.
OC4PHF957	FLARES	N/A	R1111-01	30 TAC Chapter 111, Visible Emissions	No changing attributes.
OC4PHF957	FLARES	N/A	R5720-01	30 TAC Chapter 115, HRVOC Vent Gas	No changing attributes.
OC4PHF957	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-01	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
OC4PHF957	FLARES	N/A	60A-01	40 CFR Part 60, Subpart A	No changing attributes.
OC4PHF957	FLARES	N/A	63A-01	40 CFR Part 63, Subpart A	No changing attributes.
OC4PHF957	EMISSION POINTS/STATIONARY	N/A	63FFFF-01	40 CFR Part 63, Subpart FFFF	No changing attributes.



### Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
	VENTS/PROCESS VENTS				
OC4PHFU2	FUGITIVE EMISSION UNITS	N/A	R5780-ALL	30 TAC Chapter 115, HRVOC Fugitive Emissions	No changing attributes.
OC4PHFU2	FUGITIVE EMISSION UNITS	N/A	R5352-ALL	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	No changing attributes.
OC4PHFU2	FUGITIVE EMISSION UNITS	N/A	60VVa-01	40 CFR Part 60, Subpart VVa	No changing attributes.
OC4PHFU2	FUGITIVE EMISSION UNITS	N/A	63FFFF-01	40 CFR Part 63, Subpart FFFF	No changing attributes.
OC4PHFU2	FUGITIVE EMISSION UNITS	N/A	63H-ALL	40 CFR Part 63, Subpart H	No changing attributes.
OC4PHGE001	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R1111-01	30 TAC Chapter 111, Visible Emissions	No changing attributes.
OC4PHGE001	SRIC ENGINES	N/A	R71CI-01	30 TAC Chapter 117, Subchapter B	No changing attributes.
OC4PHGE001	SRIC ENGINES	N/A	63ZZZZ-01	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
OC4PHGE860	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R1111-01	30 TAC Chapter 111, Visible Emissions	No changing attributes.
OC4PHGE860	SRIC ENGINES	N/A	R71CI-01	30 TAC Chapter 117, Subchapter B	No changing attributes.
OC4PHGE860	SRIC ENGINES	N/A	60III-01	40 CFR Part 60, Subpart III	No changing attributes.

### Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
OC4PHGE860	SRIC ENGINES	N/A	63ZZZZ-01	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
OC4PHH310	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R1111-01	30 TAC Chapter 111, Visible Emissions	No changing attributes.
OC4PHH310	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5720-01	30 TAC Chapter 115, HRVOC Vent Gas	No changing attributes.
OC4PHH310	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-01	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
OC4PHH310	PROCESS HEATERS/FURNACES	N/A	R7ICI-01	30 TAC Chapter 117, Subchapter B	No changing attributes.
OC4PHH310	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63FFFF-01	40 CFR Part 63, Subpart FFFF	No changing attributes.
OC4PHH320	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R1111-01	30 TAC Chapter 111, Visible Emissions	No changing attributes.
OC4PHH320	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5720-01	30 TAC Chapter 115, HRVOC Vent Gas	No changing attributes.
OC4PHH320	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-01	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
OC4PHH320	PROCESS HEATERS/FURNACES	N/A	R7ICI-01	30 TAC Chapter 117, Subchapter B	No changing attributes.

### Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
OC4PHH320	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63FFFF-01	40 CFR Part 63, Subpart FFFF	No changing attributes.
OC4PHH330	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R1111-01	30 TAC Chapter 111, Visible Emissions	No changing attributes.
OC4PHH330	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5720-01	30 TAC Chapter 115, HRVOC Vent Gas	No changing attributes.
OC4PHH330	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-01	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
OC4PHH330	PROCESS HEATERS/FURNACES	N/A	R7ICI-01	30 TAC Chapter 117, Subchapter B	No changing attributes.
OC4PHH330	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63FFFF-01	40 CFR Part 63, Subpart FFFF	No changing attributes.
OC4PHH340	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R1111-01	30 TAC Chapter 111, Visible Emissions	No changing attributes.
OC4PHH340	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5720-01	30 TAC Chapter 115, HRVOC Vent Gas	No changing attributes.
OC4PHH340	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-01	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
OC4PHH340	PROCESS HEATERS/FURNACES	N/A	R7ICI-01	30 TAC Chapter 117, Subchapter B	No changing attributes.

### Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
OC4PHH340	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63FFFF-01	40 CFR Part 63, Subpart FFFF	No changing attributes.
OC4PHLR1	LOADING/UNLOADING OPERATIONS	N/A	R5211-01	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.
OC4PHLR7	LOADING/UNLOADING OPERATIONS	N/A	R5211-01	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.
OC4PHMEHFP	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5720-01	30 TAC Chapter 115, HRVOC Vent Gas	No changing attributes.
OC4PHO470	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R1111-01	30 TAC Chapter 111, Visible Emissions	No changing attributes.
OC4PHPV450	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63FFFF-01	40 CFR Part 63, Subpart FFFF	No changing attributes.
OC4PHPV497	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-01	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
OC4PHPV512	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-01	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
OC4PHPV513	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-01	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
OC4PHPV516	EMISSION	N/A	R5121-01	30 TAC Chapter 115,	No changing attributes.

### Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
	POINTS/STATIONARY VENTS/PROCESS VENTS			Vent Gas Controls	
OC4PHPV5621	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-01	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
OC4PHPV5641	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-01	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
OC4PHPV662	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-01	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
OC4PHPV663	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-01	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
OC4PHPV677	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-01	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
OC4PHPV820	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5720-01	30 TAC Chapter 115, HRVOC Vent Gas	No changing attributes.
OC4PHPV834	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-01	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
OC4PHPV836	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-01	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
OC4PHRX311	EMISSION POINTS/STATIONARY	N/A	63FFFF-01	40 CFR Part 63, Subpart FFFF	Emission Standard = The TRE index is not maintained above the

### Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
	VENTS/PROCESS VENTS				threshold (5.0 for a new source and 1.9 for an existing source) and a flare is being used for control., Determined Hal = The emission stream is determined to be non-halogenated., Designated Grp1 = The emission stream is designated as Group 1., Negative Pressure = The closed vent system is operated and maintained at or above atmospheric pressure., Designated Hal = The emission stream is not designated as halogenated., Prior Eval = The data from a prior evaluation or assessment is not used., Bypass Line = No bypass lines., Assessment Waiver = The Administrator has granted a waiver of compliance assessment.
OC4PHRX311	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63FFFF-02	40 CFR Part 63, Subpart FFFF	Emission Standard = The TRE index is not maintained above the threshold (5.0 for a new source and 1.9 for an existing source) and a non-flare CD is being used to meet a ppmv standard per § 63.2455(a) - Table 1.1.a.i., Hal Device Type = No halogen scrubber or other halogen reduction device is used., Alt 63SS Mon Parameters = Alternate monitoring parameters or requirements have not been approved by the Administrator or

### Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
					<p>have not been requested.,  Formaldehyde = The stream does not contain formaldehyde., Bypass Line = No bypass lines., Prior Eval = The data from a prior evaluation or assessment is not used., CEMS = A CEMS is not used., Designated Grp1 = The emission stream is designated as Group 1., Small Device = A small control device (defined in § 63.2550) is not being used., Designated Hal = The emission stream is not designated as halogenated., Negative Pressure = The closed vent system is operated and maintained at or above atmospheric pressure., SS Device Type = Boiler or process heater with a design heat input capacity equal to or greater than 44 megawatts (MW) or in which all vent streams are introduced with the primary fuel or are used as the primary fuel., Meets 63.988(b)(2) = The control device does not meet the criteria in § 63.985(b)(2)., Determined Hal = The emission stream is determined to be non-halogenated., Assessment Waiver = The Administrator has not granted a waiver of compliance assessment or no waiver is requested.</p>
OC4PHRX321	EMISSION	N/A	63FFFF-01	40 CFR Part 63, Subpart	Emission Standard = The TRE

### Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
	POINTS/STATIONARY VENTS/PROCESS VENTS			FFFF	index is not maintained above the threshold (5.0 for a new source and 1.9 for an existing source) and a flare is being used for control., Determined Hal = The emission stream is determined to be non-halogenated., Designated Grp1 = The emission stream is designated as Group 1., Negative Pressure = The closed vent system is operated and maintained at or above atmospheric pressure., Designated Hal = The emission stream is not designated as halogenated., Prior Eval = The data from a prior evaluation or assessment is not used., Bypass Line = No bypass lines., Assessment Waiver = The Administrator has granted a waiver of compliance assessment.
OC4PHRX321	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63FFFF-02	40 CFR Part 63, Subpart FFFF	Emission Standard = The TRE index is not maintained above the threshold (5.0 for a new source and 1.9 for an existing source) and a non-flare CD is being used to meet a ppmv standard per § 63.2455(a) - Table 1.1.a.i., Hal Device Type = No halogen scrubber or other halogen reduction device is used., Alt 63SS Mon Parameters = Alternate monitoring parameters or requirements have not been



### Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
					<p>approved by the Administrator or have not been requested.,</p> <p>Formaldehyde = The stream does not contain formaldehyde., Bypass Line = No bypass lines., Prior Eval = The data from a prior evaluation or assessment is not used., CEMS = A CEMS is not used., Designated Grp1 = The emission stream is designated as Group 1., Small Device = A small control device (defined in § 63.2550) is not being used., Designated Hal = The emission stream is not designated as halogenated., Negative Pressure = The closed vent system is operated and maintained at or above atmospheric pressure., SS Device Type = Boiler or process heater with a design heat input capacity equal to or greater than 44 megawatts (MW) or in which all vent streams are introduced with the primary fuel or are used as the primary fuel., Meets 63.988(b)(2) = The control device does not meet the criteria in § 63.985(b)(2)., Determined Hal = The emission stream is determined to be non-halogenated., Assessment Waiver = The Administrator has not granted a waiver of compliance assessment or no waiver is requested.</p>

### Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
OC4PHRX331	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63FFFF-01	40 CFR Part 63, Subpart FFFF	Emission Standard = The TRE index is not maintained above the threshold (5.0 for a new source and 1.9 for an existing source) and a flare is being used for control., Determined Hal = The emission stream is determined to be non-halogenated., Designated Grp1 = The emission stream is designated as Group 1., Negative Pressure = The closed vent system is operated and maintained at or above atmospheric pressure., Designated Hal = The emission stream is not designated as halogenated., Prior Eval = The data from a prior evaluation or assessment is not used., Bypass Line = No bypass lines., Assessment Waiver = The Administrator has granted a waiver of compliance assessment.
OC4PHRX331	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63FFFF-02	40 CFR Part 63, Subpart FFFF	Emission Standard = The TRE index is not maintained above the threshold (5.0 for a new source and 1.9 for an existing source) and a non-flare CD is being used to meet a ppmv standard per § 63.2455(a) - Table 1.1.a.i., Hal Device Type = No halogen scrubber or other halogen reduction device is used., Alt 63SS Mon Parameters = Alternate monitoring parameters or

### Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
					<p>requirements have not been approved by the Administrator or have not been requested.,</p> <p>Formaldehyde = The stream does not contain formaldehyde., Bypass Line = No bypass lines., Prior Eval = The data from a prior evaluation or assessment is not used., CEMS = A CEMS is not used., Designated Grp1 = The emission stream is designated as Group 1., Small Device = A small control device (defined in § 63.2550) is not being used., Designated Hal = The emission stream is not designated as halogenated., Negative Pressure = The closed vent system is operated and maintained at or above atmospheric pressure., SS Device Type = Boiler or process heater with a design heat input capacity equal to or greater than 44 megawatts (MW) or in which all vent streams are introduced with the primary fuel or are used as the primary fuel., Meets 63.988(b)(2) = The control device does not meet the criteria in § 63.985(b)(2)., Determined Hal = The emission stream is determined to be non-halogenated., Assessment Waiver = The Administrator has not granted a waiver of compliance assessment or no waiver is requested.</p>

### Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
OC4PHRX341	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63FFFF-01	40 CFR Part 63, Subpart FFFF	Emission Standard = The TRE index is not maintained above the threshold (5.0 for a new source and 1.9 for an existing source) and a flare is being used for control., Determined Hal = The emission stream is determined to be non-halogenated., Designated Grp1 = The emission stream is designated as Group 1., Negative Pressure = The closed vent system is operated and maintained at or above atmospheric pressure., Designated Hal = The emission stream is not designated as halogenated., Prior Eval = The data from a prior evaluation or assessment is not used., Bypass Line = No bypass lines., Assessment Waiver = The Administrator has granted a waiver of compliance assessment.
OC4PHRX341	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63FFFF-02	40 CFR Part 63, Subpart FFFF	Emission Standard = The TRE index is not maintained above the threshold (5.0 for a new source and 1.9 for an existing source) and a non-flare CD is being used to meet a ppmv standard per § 63.2455(a) - Table 1.1.a.i., Hal Device Type = No halogen scrubber or other halogen reduction device is used., Alt 63SS Mon Parameters = Alternate monitoring parameters or

### Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
					<p>requirements have not been approved by the Administrator or have not been requested.,</p> <p>Formaldehyde = The stream does not contain formaldehyde., Bypass Line = No bypass lines., Prior Eval = The data from a prior evaluation or assessment is not used., CEMS = A CEMS is not used., Designated Grp1 = The emission stream is designated as Group 1., Small Device = A small control device (defined in § 63.2550) is not being used., Designated Hal = The emission stream is not designated as halogenated., Negative Pressure = The closed vent system is operated and maintained at or above atmospheric pressure., SS Device Type = Boiler or process heater with a design heat input capacity equal to or greater than 44 megawatts (MW) or in which all vent streams are introduced with the primary fuel or are used as the primary fuel., Meets 63.988(b)(2) = The control device does not meet the criteria in § 63.985(b)(2)., Determined Hal = The emission stream is determined to be non-halogenated., Assessment Waiver = The Administrator has not granted a waiver of compliance assessment or no waiver is requested.</p>

### Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
OC4PHSC1	SOLVENT DEGREASING MACHINES	N/A	R5412-01	30 TAC Chapter 115, Degreasing Processes	No changing attributes.
OC4PHSC2	SOLVENT DEGREASING MACHINES	N/A	R5412-01	30 TAC Chapter 115, Degreasing Processes	No changing attributes.
OC4PHSP133	VOLATILE ORGANIC COMPOUND WATER SEPARATORS	N/A	R5131-01	30 TAC Chapter 115, Water Separation	No changing attributes.
OC4PHSP548	VOLATILE ORGANIC COMPOUND WATER SEPARATORS	N/A	R5131-01	30 TAC Chapter 115, Water Separation	No changing attributes.
OC4PHST122	STORAGE TANKS/VESSELS	N/A	R5112-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
OC4PHST138	STORAGE TANKS/VESSELS	N/A	R5112-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
OC4PHST510	STORAGE TANKS/VESSELS	N/A	R5112-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
OC4PHST660	STORAGE TANKS/VESSELS	N/A	R5112-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
OC4PHST760	STORAGE TANKS/VESSELS	N/A	R5112-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
OC4PHST761	STORAGE TANKS/VESSELS	N/A	R5112-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
OC4PHUL10	LOADING/UNLOADING OPERATIONS	N/A	R5211-01	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.
OC4PHUL11	LOADING/UNLOADING OPERATIONS	N/A	R5211-01	30 TAC Chapter 115, Loading and Unloading	No changing attributes.

### Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
				of VOC	
OC4PHUL12	LOADING/UNLOADING OPERATIONS	N/A	R5211-01	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.
OC4PHUL14	LOADING/UNLOADING OPERATIONS	N/A	R5211-01	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.
OC4PHUL17	LOADING/UNLOADING OPERATIONS	N/A	R5211-01	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.
OC4PHUL6	LOADING/UNLOADING OPERATIONS	N/A	R5211-01	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.
OC4PHUL8	LOADING/UNLOADING OPERATIONS	N/A	R5211-01	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.
OC4PHUL9	LOADING/UNLOADING OPERATIONS	N/A	R5211-01	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.
PROPDH1	CLEANING/DEPAINTING OPERATION	N/A	R5460-01	30 TAC Chapter 115, Subchapter E, Division 6	Compliance Demonstration = Limiting VOC content of the cleaning solution to 0.42 lb VOC/gal of solution, as applied.
PROPDH1	CLEANING/DEPAINTING OPERATION	N/A	R5460-02	30 TAC Chapter 115, Subchapter E, Division 6	Compliance Demonstration = Limiting the composite partial vapor pressure of the cleaning solution to 8.0 millimeters of mercury at 20 degrees Celsius (68 degrees Fahrenheit).

### Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
PROPDH1	TREATMENT PROCESS	N/A	61FF-01	40 CFR Part 61, Subpart FF	No changing attributes.
PROPDH1	CHEMICAL MANUFACTURING PROCESS	N/A	63FFFF-01	40 CFR Part 63, Subpart FFFF	No changing attributes.
PROPDH1A	CHEMICAL MANUFACTURING PROCESS	N/A	63FFFF-01	40 CFR Part 63, Subpart FFFF	No changing attributes.



### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
OC4PHCT900	EU	R5760-01	HIGHLY REACTIVE VOC	30 TAC Chapter 115, HRVOC Cooling Towers	§ 115.767(6) § 115.764(e)(2) § 115.766(i)	All sites that are subject to this division and that are located in the Houston/ Galveston/Brazoria area as defined in § 115.10, excluding Harris County, are exempt from § 115.761(b) and (c)(2), except as provided in § 115.769(a)(3).	§ 115.764(a)(3) [G]§ 115.764(a)(6) § 115.764(c) § 115.764(e)(2)	§ 115.766(a)(1) § 115.766(a)(2) § 115.766(a)(3) § 115.766(a)(5) § 115.766(a)(6) § 115.766(c) [G]§ 115.766(f) [G]§ 115.766(g) § 115.766(i)(1)	§ 115.766(i)(2)
OC4PHCT900	EU	63FFFF-01	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2490(a)-Table 10 § 63.104(a) [G]§ 63.104(d) § 63.104(e) § 63.104(e)(1) [G]§ 63.104(e)(2) § 63.2490(a) § 63.2490(b) § 63.2490(c)	For each heat exchange system, as defined in §63.101, comply with the requirements of §63.104 and the requirements referenced therein except as specified in §63.2490.	[G]§ 63.104(b)	[G]§ 63.104(e)(2) [G]§ 63.104(f)(1)	[G]§ 63.104(f)(2)
OC4PHDL460	EP	R1111-01	PM (OPACITY)	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(B) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 20% averaged over a six minute period for any source on which construction was begun after January 31, 1972.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None
OC4PHDU210	EP	63FFFF-01	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2455(a)-Table 1.1.a.ii § 63.11(b)	For each Group 1 continuous process vent, the owner or	[G]§ 63.115(d)(2)(v) § 63.115(d)(3)(iii) § 63.983(b)	§ 63.2450(f)(2) § 63.2450(f)(2)(i) § 63.2450(f)(2)(ii)	§ 63.2450(f)(2)(ii) § 63.2450(q) § 63.997(b)(2)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 63.2450(b) § 63.2455(a) § 63.2455(b) § 63.2455(b)(1) § 63.2535(h) § 63.982(b) § 63.983(a)(1) § 63.983(a)(2) § 63.983(d)(1) § 63.983(d)(1)(i) [G]§ 63.983(d)(2) § 63.983(d)(3) § 63.987(a) § 63.997(b)(2) § 63.997(b)(3) § 63.997(c)(3)	operator must reduce emissions of total organic HAP by venting emissions through a closed vent system to a flare.	[G]§ 63.983(b)(1) [G]§ 63.983(b)(2) [G]§ 63.983(b)(3) [G]§ 63.983(c)(1) § 63.983(c)(2) § 63.983(c)(3) § 63.983(d)(1) [G]§ 63.983(d)(1)(ii) § 63.987(c) § 63.997(b) § 63.997(c)(2) § 63.997(c)(3) § 63.997(c)(3)(i) § 63.997(c)(3)(ii)	§ 63.983(b) [G]§ 63.983(d)(2) § 63.987(c) § 63.998(a)(1)(ii) § 63.998(a)(1)(iii)(A) § 63.998(a)(1)(iii)(B) [G]§ 63.998(b)(1) [G]§ 63.998(b)(2) [G]§ 63.998(b)(3) [G]§ 63.998(b)(5) [G]§ 63.998(d)(1) § 63.998(d)(3)(i) § 63.998(d)(3)(ii) § 63.998(d)(5)	§ 63.997(c)(3) § 63.998(a)(1)(iii)(A) [G]§ 63.998(b)(3) [G]§ 63.999(a)(1) § 63.999(b)(5) § 63.999(c)(1) § 63.999(c)(2)(i) § 63.999(c)(3) § 63.999(c)(6) [G]§ 63.999(c)(6)(i) § 63.999(c)(6)(iv) [G]§ 63.999(d)(1) [G]§ 63.999(d)(2)
OC4PHDU220	EP	63FFFF-01	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2455(a)-Table 1.1.a.ii § 63.11(b) § 63.2450(b) § 63.2455(a) § 63.2455(b) § 63.2455(b)(1) § 63.2535(h) § 63.982(b) § 63.983(a)(1) § 63.983(a)(2) § 63.983(d)(1) § 63.983(d)(1)(i) [G]§ 63.983(d)(2) § 63.983(d)(3) § 63.987(a) § 63.997(b)(2) § 63.997(b)(3) § 63.997(c)(3)	For each Group 1 continuous process vent, the owner or operator must reduce emissions of total organic HAP by venting emissions through a closed vent system to a flare.	[G]§ 63.115(d)(2)(v) § 63.115(d)(3)(iii) § 63.983(b) [G]§ 63.983(b)(1) [G]§ 63.983(b)(2) [G]§ 63.983(b)(3) [G]§ 63.983(c)(1) § 63.983(c)(2) § 63.983(c)(3) § 63.983(d)(1) § 63.983(d)(1)(ii) § 63.987(c) § 63.997(b) § 63.997(c)(2) § 63.997(c)(3) § 63.997(c)(3)(i) § 63.997(c)(3)(ii)	§ 63.2450(f)(2) § 63.2450(f)(2)(i) § 63.2450(f)(2)(ii) § 63.983(b) [G]§ 63.983(d)(2) § 63.987(c) § 63.998(a)(1)(ii) § 63.998(a)(1)(iii)(A) § 63.998(a)(1)(iii)(B) [G]§ 63.998(b)(1) [G]§ 63.998(b)(2) [G]§ 63.998(b)(3) [G]§ 63.998(b)(5) [G]§ 63.998(d)(1) § 63.998(d)(3)(i) § 63.998(d)(3)(ii) § 63.998(d)(5)	§ 63.2450(f)(2)(ii) § 63.2450(q) § 63.997(b)(2) § 63.997(c)(3) § 63.998(a)(1)(iii)(A) [G]§ 63.998(b)(3) [G]§ 63.999(a)(1) § 63.999(b)(5) § 63.999(c)(1) § 63.999(c)(2)(i) § 63.999(c)(3) § 63.999(c)(6) [G]§ 63.999(c)(6)(i) § 63.999(c)(6)(iv) [G]§ 63.999(d)(1) [G]§ 63.999(d)(2)
OC4PHDU610	EP	63FFFF-	112(B)	40 CFR Part 63,	§ 63.2455(a)-Table	For each Group 1	[G]§ 63.115(d)(2)(v)	§ 63.2450(f)(2)	§ 63.2450(f)(2)(ii)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
		01	HAPS	Subpart FFFF	1.1.a.ii § 63.11(b) § 63.2450(b) § 63.2455(a) § 63.2455(b) § 63.2455(b)(1) § 63.2535(h) § 63.982(b) § 63.983(a)(1) § 63.983(a)(2) § 63.983(d)(1) § 63.983(d)(1)(i) [G]§ 63.983(d)(2) § 63.983(d)(3) § 63.987(a) § 63.997(b)(2) § 63.997(b)(3) § 63.997(c)(3)	continuous process vent, the owner or operator must reduce emissions of total organic HAP by venting emissions through a closed vent system to a flare.	§ 63.115(d)(3)(iii) § 63.983(b) [G]§ 63.983(b)(1) [G]§ 63.983(b)(2) [G]§ 63.983(b)(3) [G]§ 63.983(c)(1) § 63.983(c)(2) § 63.983(c)(3) § 63.983(d)(1) § 63.983(d)(1)(ii) § 63.987(c) § 63.997(b) § 63.997(c)(2) § 63.997(c)(3) § 63.997(c)(3)(i) § 63.997(c)(3)(ii)	§ 63.2450(f)(2)(i) § 63.2450(f)(2)(ii) § 63.983(b) [G]§ 63.983(d)(2) § 63.987(c) § 63.998(a)(1)(ii) § 63.998(a)(1)(iii)(A) § 63.998(a)(1)(iii)(B) [G]§ 63.998(b)(1) [G]§ 63.998(b)(2) [G]§ 63.998(b)(3) [G]§ 63.998(b)(5) [G]§ 63.998(d)(1) § 63.998(d)(3)(i) § 63.998(d)(3)(ii) § 63.998(d)(5)	§ 63.2450(q) § 63.997(b)(2) § 63.997(c)(3) § 63.998(a)(1)(iii)(A) [G]§ 63.998(b)(3) [G]§ 63.999(a)(1) § 63.999(b)(5) § 63.999(c)(1) § 63.999(c)(2)(i) § 63.999(c)(3) § 63.999(c)(6) [G]§ 63.999(c)(6)(i) § 63.999(c)(6)(iv) [G]§ 63.999(d)(1) [G]§ 63.999(d)(2)
OC4PHDU610	EP	63FFFF-02	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2455(a)-Table 1.1.a.i § 63.2450(b) § 63.2450(i)(1) § 63.2450(i)(2) § 63.2455(a) § 63.2455(b) § 63.2455(b)(1) § 63.2455(b)(2) § 63.2455(b)(3) § 63.2535(h) § 63.982(c) § 63.982(c)(2) § 63.983(a)(1) § 63.983(a)(2) § 63.983(d)(1) § 63.983(d)(1)(i) [G]§ 63.983(d)(2) § 63.983(d)(3)	For each Group 1 continuous process vent, the owner or operator must reduce emissions to an outlet process concentration less than or equal to 20 ppmv as organic HAP or TOC by venting emissions through a closed-vent system to any combination of control devices (except flare).	§ 63.115(d) [G]§ 63.115(d)(1) § 63.115(d)(2) § 63.115(d)(2)(i) [G]§ 63.115(d)(2)(ii) § 63.115(d)(2)(iii) § 63.115(d)(2)(iv) [G]§ 63.115(d)(2)(v) § 63.115(d)(3)(i) § 63.115(d)(3)(ii) § 63.115(d)(3)(iii) § 63.2450(g) § 63.2450(g)(1) § 63.2450(g)(2) [G]§ 63.2450(g)(3) § 63.2450(g)(4) § 63.2450(k)(6) § 63.983(b) [G]§ 63.983(b)(1)	§ 63.2450(k)(6) § 63.2525(g) § 63.2525(h) § 63.983(b) [G]§ 63.983(d)(2) § 63.988(b)(1) § 63.996(c)(2)(ii) § 63.998(a)(2)(i) § 63.998(a)(2)(ii)(A) § 63.998(a)(2)(ii)(B)(5) [G]§ 63.998(b)(1) [G]§ 63.998(b)(2) [G]§ 63.998(b)(3) [G]§ 63.998(b)(5) [G]§ 63.998(c)(1) § 63.998(c)(2)(iii) § 63.998(c)(3)(iii) [G]§ 63.998(d)(1) § 63.998(d)(3)(i)	§ 63.2450(q) § 63.988(b)(1) § 63.996(b)(2) § 63.996(c)(6) § 63.997(c)(3) § 63.998(a)(2)(ii)(A) [G]§ 63.999(a)(1) [G]§ 63.999(a)(2) [G]§ 63.999(b)(3) § 63.999(b)(5) § 63.999(c)(1) § 63.999(c)(2)(i) § 63.999(c)(6) [G]§ 63.999(c)(6)(i) § 63.999(c)(6)(iv)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 63.988(a)(1) § 63.988(a)(2) § 63.988(a)(3) § 63.996(c)(1) § 63.996(c)(2) § 63.996(c)(2)(i) § 63.996(c)(3) § 63.996(c)(4) § 63.996(c)(5) § 63.996(c)(6) [G]§ 63.997(c)(1) § 63.997(c)(3) [G]§ 63.997(d)		[G]§ 63.983(b)(2) [G]§ 63.983(b)(3) [G]§ 63.983(c)(1) § 63.983(c)(2) § 63.983(c)(3) § 63.983(d)(1) § 63.983(d)(1)(ii) § 63.988(b)(1) § 63.996(b)(1) § 63.996(b)(1)(i) § 63.996(b)(2) § 63.997(a) [G]§ 63.997(c)(1) § 63.997(c)(2) § 63.997(c)(3) § 63.997(c)(3)(iii) [G]§ 63.997(d) § 63.997(e) § 63.997(e)(1)(i) [G]§ 63.997(e)(1)(iv) [G]§ 63.997(e)(1)(v) § 63.997(e)(2) § 63.997(e)(2)(i) § 63.997(e)(2)(i)(B) § 63.997(e)(2)(ii) § 63.997(e)(2)(iii) § 63.997(e)(2)(iii)(A) [G]§ 63.997(e)(2)(iii)(B) [G]§ 63.997(e)(2)(iii)(C) [G]§ 63.997(e)(2)(iii)(D) [G]§ 63.997(e)(2)(iii)(E)	§ 63.998(d)(3)(ii) § 63.998(d)(5)	
OC4PHDU620	EP	63FFFF-01	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2455(a)-Table 1.1.a.ii § 63.11(b) § 63.2450(b) § 63.2455(a) § 63.2455(b)	For each Group 1 continuous process vent, the owner or operator must reduce emissions of total organic HAP by	[G]§ 63.115(d)(2)(v) § 63.115(d)(3)(iii) § 63.983(b) [G]§ 63.983(b)(1) [G]§ 63.983(b)(2) [G]§ 63.983(b)(3)	§ 63.2450(f)(2) § 63.2450(f)(2)(i) § 63.2450(f)(2)(ii) § 63.983(b) [G]§ 63.983(d)(2) § 63.987(c)	§ 63.2450(f)(2)(ii) § 63.2450(q) § 63.997(b)(2) § 63.997(c)(3) § 63.998(a)(1)(iii)(A) [G]§ 63.998(b)(3)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 63.2455(b)(1) § 63.2535(h) § 63.982(b) § 63.983(a)(1) § 63.983(a)(2) § 63.983(d)(1) § 63.983(d)(1)(i) [G]§ 63.983(d)(2) § 63.983(d)(3) § 63.987(a) § 63.997(b)(2) § 63.997(b)(3) § 63.997(c)(3)	venting emissions through a closed vent system to a flare.	[G]§ 63.983(c)(1) § 63.983(c)(2) § 63.983(c)(3) § 63.983(d)(1) § 63.983(d)(1)(ii) § 63.987(c) § 63.997(b) § 63.997(c)(2) § 63.997(c)(3) § 63.997(c)(3)(i) § 63.997(c)(3)(ii)	§ 63.998(a)(1)(ii) § 63.998(a)(1)(iii)(A) § 63.998(a)(1)(iii)(B) [G]§ 63.998(b)(1) [G]§ 63.998(b)(2) [G]§ 63.998(b)(3) [G]§ 63.998(b)(5) [G]§ 63.998(d)(1) § 63.998(d)(3)(i) § 63.998(d)(3)(ii) § 63.998(d)(5)	[G]§ 63.999(a)(1) § 63.999(b)(5) § 63.999(c)(1) § 63.999(c)(2)(i) § 63.999(c)(3) § 63.999(c)(6) [G]§ 63.999(c)(6)(i) § 63.999(c)(6)(iv) [G]§ 63.999(d)(1) [G]§ 63.999(d)(2)
OC4PHDU620	EP	63FFFF-02	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2455(a)-Table 1.1.a.i § 63.2450(b) § 63.2450(i)(1) § 63.2450(i)(2) § 63.2455(a) § 63.2455(b) § 63.2455(b)(1) § 63.2455(b)(2) § 63.2455(b)(3) § 63.2535(h) § 63.982(c) § 63.982(c)(2) § 63.983(a)(1) § 63.983(a)(2) § 63.983(d)(1) § 63.983(d)(1)(i) [G]§ 63.983(d)(2) § 63.983(d)(3) § 63.988(a)(1) § 63.988(a)(2) § 63.988(a)(3) § 63.996(c)(1) § 63.996(c)(2)	For each Group 1 continuous process vent, the owner or operator must reduce emissions to an outlet process concentration less than or equal to 20 ppmv as organic HAP or TOC by venting emissions through a closed-vent system to any combination of control devices (except flare).	§ 63.115(d) [G]§ 63.115(d)(1) § 63.115(d)(2) § 63.115(d)(2)(i) [G]§ 63.115(d)(2)(ii) § 63.115(d)(2)(iii) § 63.115(d)(2)(iv) [G]§ 63.115(d)(2)(v) § 63.115(d)(3)(i) § 63.115(d)(3)(ii) § 63.115(d)(3)(iii) § 63.2450(g) § 63.2450(g)(1) § 63.2450(g)(2) [G]§ 63.2450(g)(3) § 63.2450(g)(4) § 63.2450(k)(6) § 63.983(b) [G]§ 63.983(b)(1) [G]§ 63.983(b)(2) [G]§ 63.983(b)(3) [G]§ 63.983(c)(1) § 63.983(c)(2) § 63.983(c)(3)	§ 63.2450(k)(6) § 63.2525(g) § 63.2525(h) § 63.983(b) [G]§ 63.983(d)(2) § 63.988(b)(1) § 63.996(c)(2)(ii) § 63.998(a)(2)(i) § 63.998(a)(2)(ii)(A) § 63.998(a)(2)(ii)(B)(5) [G]§ 63.998(b)(1) [G]§ 63.998(b)(2) [G]§ 63.998(b)(3) [G]§ 63.998(b)(5) [G]§ 63.998(c)(1) § 63.998(c)(2)(iii) § 63.998(c)(3)(iii) [G]§ 63.998(d)(1) § 63.998(d)(3)(i) § 63.998(d)(3)(ii) § 63.998(d)(5)	§ 63.2450(q) § 63.988(b)(1) § 63.996(b)(2) § 63.996(c)(6) § 63.997(c)(3) § 63.998(a)(2)(ii)(A) [G]§ 63.998(b)(3) [G]§ 63.999(a)(1) [G]§ 63.999(a)(2) [G]§ 63.999(b)(3) § 63.999(b)(5) § 63.999(c)(1) § 63.999(c)(2)(i) § 63.999(c)(6) [G]§ 63.999(c)(6)(i) § 63.999(c)(6)(iv)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 63.996(c)(2)(i) § 63.996(c)(3) § 63.996(c)(4) § 63.996(c)(5) § 63.996(c)(6) [G]§ 63.997(c)(1) § 63.997(c)(3) [G]§ 63.997(d)		§ 63.983(d)(1) § 63.983(d)(1)(ii) § 63.988(b)(1) § 63.996(b)(1) § 63.996(b)(1)(i) § 63.996(b)(2) § 63.997(a) [G]§ 63.997(c)(1) § 63.997(c)(2) § 63.997(c)(3) § 63.997(c)(3)(iii) [G]§ 63.997(d) § 63.997(e) § 63.997(e)(1)(i) [G]§ 63.997(e)(1)(iv) [G]§ 63.997(e)(1)(v) § 63.997(e)(2) § 63.997(e)(2)(i) § 63.997(e)(2)(i)(B) § 63.997(e)(2)(ii) § 63.997(e)(2)(iii) § 63.997(e)(2)(iii)(A) [G]§ 63.997(e)(2)(iii)(B) [G]§ 63.997(e)(2)(iii)(C) [G]§ 63.997(e)(2)(iii)(D) [G]§ 63.997(e)(2)(iii)(E)		
OC4PHDU650	EP	63FFFF-01	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2455(a)-Table 1.1.a.ii § 63.11(b) § 63.2450(b) § 63.2455(a) § 63.2455(b) § 63.2455(b)(1) § 63.2535(h) § 63.982(b) § 63.983(a)(1) § 63.983(a)(2)	For each Group 1 continuous process vent, the owner or operator must reduce emissions of total organic HAP by venting emissions through a closed vent system to a flare.	[G]§ 63.115(d)(2)(v) § 63.115(d)(3)(iii) § 63.983(b) [G]§ 63.983(b)(1) [G]§ 63.983(b)(2) [G]§ 63.983(b)(3) [G]§ 63.983(c)(1) § 63.983(c)(2) § 63.983(c)(3) § 63.983(d)(1) § 63.983(d)(1)(ii)	§ 63.2450(f)(2) § 63.2450(f)(2)(i) § 63.2450(f)(2)(ii) § 63.983(b) [G]§ 63.983(d)(2) § 63.987(c) § 63.998(a)(1)(ii) § 63.998(a)(1)(iii)(A) § 63.998(a)(1)(iii)(B) [G]§ 63.998(b)(1) [G]§ 63.998(b)(2)	§ 63.2450(f)(2)(ii) § 63.2450(q) § 63.997(b)(2) § 63.997(c)(3) § 63.998(a)(1)(iii)(A) [G]§ 63.998(b)(3) [G]§ 63.999(a)(1) § 63.999(b)(5) § 63.999(c)(1) § 63.999(c)(2)(i) § 63.999(c)(3)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 63.983(d)(1) § 63.983(d)(1)(i) [G]§ 63.983(d)(2) § 63.983(d)(3) § 63.987(a) § 63.997(b)(2) § 63.997(b)(3) § 63.997(c)(3)		§ 63.987(c) § 63.997(b) § 63.997(c)(2) § 63.997(c)(3) § 63.997(c)(3)(i) § 63.997(c)(3)(ii)	[G]§ 63.998(b)(3) [G]§ 63.998(b)(5) [G]§ 63.998(d)(1) § 63.998(d)(3)(i) § 63.998(d)(3)(ii) § 63.998(d)(5)	§ 63.999(c)(6) [G]§ 63.999(c)(6)(i) § 63.999(c)(6)(iv) [G]§ 63.999(d)(1) [G]§ 63.999(d)(2)
OC4PHF9551	EU	R1111-01	PM (OPACITY)	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(4)(A)	Visible emissions from a process gas flare shall not be permitted for more than five minutes in any two-hour period, except for upset emissions as provided in §101.11(a).	§ 111.111(a)(4)(A)(i) § 111.111(a)(4)(A)(ii)	§ 111.111(a)(4)(A)(ii)	None
OC4PHF9551	EP	R5720-01	HIGHLY REACTIVE VOC	30 TAC Chapter 115, HRVOC Vent Gas	§ 115.722(d) § 115.722(d)(1) § 115.722(d)(2) [G]§ 115.725(d)(1) § 115.725(d)(2) § 115.725(d)(2)(A)(i) [G]§ 115.725(d)(2)(A)(ii) § 115.725(d)(2)(A)(iii) § 115.725(d)(2)(A)(iv) § 115.725(d)(2)(B) § 115.725(d)(2)(B)(i) § 115.725(d)(2)(B)(ii) § 115.725(d)(2)(B)(iii) § 115.725(d)(2)(B)(iv) [G]§ 115.725(l) § 115.725(m)(2)(A) § 115.725(m)(2)(B)	All flares must continuously meet the requirements of 40 CFR § 60.18(c)(2)-(6) and (d) as amended through October 17, 2000 (65 FR 61744) when vent gas containing HRVOC is being routed to the flare.	[G]§ 115.725(d)(1) § 115.725(d)(2) § 115.725(d)(2)(A)(i) [G]§ 115.725(d)(2)(A)(ii) § 115.725(d)(2)(A)(iii) § 115.725(d)(2)(A)(iv) § 115.725(d)(2)(B) § 115.725(d)(2)(B)(i) § 115.725(d)(2)(B)(ii) § 115.725(d)(2)(B)(iii) § 115.725(d)(2)(B)(iv) § 115.725(d)(3) § 115.725(d)(4) § 115.725(d)(5) § 115.725(d)(6) § 115.725(d)(7) [G]§ 115.725(l) § 115.725(m)(1) § 115.725(m)(2)(A)	§ 115.726(a)(1) § 115.726(a)(1)(A) § 115.726(d)(1) § 115.726(d)(2) § 115.726(d)(3) § 115.726(d)(4) § 115.726(i) § 115.726(j)(1) § 115.726(j)(2)	§ 115.725(n) § 115.726(a)(1)(B)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
							§ 115.725(m)(2)(B) § 115.725(n)		
OC4PHF9551	EP	R5121-01	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(2) § 115.121(a)(2) § 115.122(a)(2)(A) § 60.18	Any vent gas streams affected by §115.121(a)(2) of this title must be controlled properly with a control efficiency of at least 98% or to a VOC concentration of no more than 20 ppmv (on a dry basis corrected to 3.0% oxygen for combustion devices).	[G]§ 115.125 § 115.126(1) § 115.126(1)(B) § 115.126(2) § 115.126(7)	§ 115.126 § 115.126(1) § 115.126(1)(B) § 115.126(2)	None
OC4PHF9551	CD	60A-01	OPACITY	40 CFR Part 60, Subpart A	§ 60.18(b) § 60.18(c)(1) § 60.18(c)(2) § 60.18(c)(3)(ii) § 60.18(c)(4)(ii) § 60.18(c)(6) § 60.18(e)	Flares shall comply with paragraphs (c)-(f) of § 60.18.	§ 60.18(d) § 60.18(f)(1) § 60.18(f)(2) § 60.18(f)(3) § 60.18(f)(4)	None	None
OC4PHF9551	CD	60A-02	OPACITY	40 CFR Part 60, Subpart A	§ 60.18(b) § 60.18(c)(1) § 60.18(c)(2) § 60.18(c)(3)(ii) § 60.18(c)(4)(iii) § 60.18(c)(6) § 60.18(e)	Flares shall comply with paragraphs (c)-(f) of § 60.18.	§ 60.18(d) § 60.18(f)(1) § 60.18(f)(2) § 60.18(f)(3) § 60.18(f)(4) § 60.18(f)(5)	None	None
OC4PHF9551	CD	63A-01	112(B) HAPS	40 CFR Part 63, Subpart A	§ 63.11(b)(4) § 63.11(b)(1) § 63.11(b)(2) § 63.11(b)(3) § 63.11(b)(5)	Flares shall be designed and operated with no visible emissions, except for periods of a	§ 63.11(b)(4) § 63.11(b)(5) § 63.11(b)(7)(i)	None	None



### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 63.11(b)(6)(ii) § 63.11(b)(7)(iii)	total of 5 minutes or less during any 2 consecutive hrs. Test Method 22 in App. A of part 60 of this chapter shall be used.			
OC4PHF9551	CD	63A-02	112(B) HAPS	40 CFR Part 63, Subpart A	§ 63.11(b)(4) § 63.11(b)(1) § 63.11(b)(2) § 63.11(b)(3) § 63.11(b)(5) § 63.11(b)(6)(ii) § 63.11(b)(7)(ii)	Flares shall be designed and operated with no visible emissions, except for periods of a total of 5 minutes or less during any 2 consecutive hrs. Test Method 22 in App. A of part 60 of this chapter shall be used.	§ 63.11(b)(4) § 63.11(b)(5) § 63.11(b)(7)(i)	None	None
OC4PHF9551	EP	63FFFF-01	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2455(a)-Table 1.1.a.ii § 63.11(b) § 63.2450(b) § 63.2455(a) § 63.2455(b) § 63.2455(b)(1) § 63.982(b) § 63.983(a)(1) § 63.983(a)(2) § 63.983(d)(1) § 63.983(d)(1)(i) [G]§ 63.983(d)(2) § 63.983(d)(3) § 63.987(a) § 63.997(b)(2) § 63.997(b)(3) § 63.997(c)(3)	For each Group 1 continuous process vent, the owner or operator must reduce emissions of total organic HAP by venting emissions through a closed vent system to a flare.	[G]§ 63.115(d)(2)(v) § 63.115(d)(3)(iii) § 63.983(b) [G]§ 63.983(b)(1) [G]§ 63.983(b)(2) [G]§ 63.983(b)(3) [G]§ 63.983(c)(1) § 63.983(c)(2) § 63.983(c)(3) § 63.983(d)(1) § 63.983(d)(1)(ii) § 63.987(c) [G]§ 63.998(b)(2) [G]§ 63.998(b)(3) [G]§ 63.997(b) § 63.997(c)(2) § 63.997(c)(3) § 63.997(c)(3)(i) § 63.997(c)(3)(ii)	§ 63.2450(f)(2) § 63.2450(f)(2)(i) § 63.2450(f)(2)(ii) § 63.983(b) [G]§ 63.983(d)(2) § 63.987(c) § 63.998(a)(1)(ii) § 63.998(a)(1)(iii)(A) § 63.998(a)(1)(iii)(B) [G]§ 63.998(b)(1) [G]§ 63.998(b)(2) [G]§ 63.998(b)(3) [G]§ 63.998(b)(5) [G]§ 63.998(d)(1) § 63.998(d)(3)(i) § 63.998(d)(3)(ii) § 63.998(d)(5)	§ 63.2450(f)(2)(ii) § 63.2450(q) § 63.997(b)(2) § 63.997(c)(3) § 63.998(a)(1)(iii)(A) [G]§ 63.998(b)(3) [G]§ 63.999(a)(1) § 63.999(b)(5) § 63.999(c)(1) § 63.999(c)(2)(i) § 63.999(c)(3) § 63.999(c)(6) [G]§ 63.999(c)(6)(i) § 63.999(c)(6)(iv) [G]§ 63.999(d)(1) [G]§ 63.999(d)(2)
OC4PHF9552	EU	R1111-01	PM	30 TAC	§ 111.111(a)(4)(A)	Visible emissions	§ 111.111(a)(4)(A)(i)	§ 111.111(a)(4)(A)(ii)	None

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
			(OPACITY)	Chapter 111, Visible Emissions		from a process gas flare shall not be permitted for more than five minutes in any two-hour period, except for upset emissions as provided in §101.11(a).	§ 111.111(a)(4)(A)(ii)		
OC4PHF9552	EP	R5720-01	HIGHLY REACTIVE VOC	30 TAC Chapter 115, HRVOC Vent Gas	§ 115.722(d) § 115.722(d)(1) § 115.722(d)(2) [G]§ 115.725(d)(1) § 115.725(d)(2) § 115.725(d)(2)(A)(i) [G]§ 115.725(d)(2)(A)(ii) § 115.725(d)(2)(A)(iii) § 115.725(d)(2)(A)(iv) § 115.725(d)(2)(B) § 115.725(d)(2)(B)(i) § 115.725(d)(2)(B)(ii) § 115.725(d)(2)(B)(iii) § 115.725(d)(2)(B)(iv) [G]§ 115.725(l) § 115.725(m)(2)(A) § 115.725(m)(2)(B)	All flares must continuously meet the requirements of 40 CFR § 60.18(c)(2)-(6) and (d) as amended through October 17, 2000 (65 FR 61744) when vent gas containing HRVOC is being routed to the flare.	[G]§ 115.725(d)(1) § 115.725(d)(2) § 115.725(d)(2)(A)(i) [G]§ 115.725(d)(2)(A)(ii) § 115.725(d)(2)(A)(iii) § 115.725(d)(2)(A)(iv) § 115.725(d)(2)(B) § 115.725(d)(2)(B)(i) § 115.725(d)(2)(B)(ii) § 115.725(d)(2)(B)(iii) § 115.725(d)(2)(B)(iv) § 115.725(d)(3) § 115.725(d)(4) § 115.725(d)(5) § 115.725(d)(6) § 115.725(d)(7) [G]§ 115.725(l) § 115.725(m)(1) § 115.725(m)(2)(A) § 115.725(m)(2)(B) § 115.725(n)	§ 115.726(a)(1) § 115.726(a)(1)(A) § 115.726(d)(1) § 115.726(d)(2) § 115.726(d)(3) § 115.726(d)(4) § 115.726(i) § 115.726(j)(1) § 115.726(j)(2)	§ 115.725(n) § 115.726(a)(1)(B)
OC4PHF9552	EP	R5121-01	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.123(a)(1) § 115.910	Alternate methods of demonstrating and documenting continuous compliance with the applicable control requirements or	§ **See Alternative Requirements [G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2)	None

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						exemption criteria in this division may be approved by the Executive Director in accordance with §115.910 of this title if emission reduction are demonstrated to be substantially equivalent.			
OC4PHF9552	CD	63A-01	112(B) HAPS	40 CFR Part 63, Subpart A	§ 63.11(b)(4) § 63.11(b)(1) § 63.11(b)(2) § 63.11(b)(3) § 63.11(b)(5) § 63.11(b)(6)(i)(A) § 63.11(b)(6)(i)(B) § 63.11(b)(7)(i)	Flares shall be designed and operated with no visible emissions, except for periods of a total of 5 minutes or less during any 2 consecutive hrs. Test Method 22 in App. A of part 60 of this chapter shall be used.	§ 63.11(b)(4) § 63.11(b)(5) § 63.11(b)(7)(i)	None	None
OC4PHF9552	CD	63A-02	112(B) HAPS	40 CFR Part 63, Subpart A	§ 63.11(b)(4) § 63.11(b)(1) § 63.11(b)(2) § 63.11(b)(3) § 63.11(b)(5) § 63.11(b)(6)(i)(A) § 63.11(b)(6)(i)(B) § 63.11(b)(7)(i)	Flares shall be designed and operated with no visible emissions, except for periods of a total of 5 minutes or less during any 2 consecutive hrs. Test Method 22 in App. A of part 60 of this chapter shall be used.	§ 63.11(b)(4) § 63.11(b)(5) § 63.11(b)(7)(i)	None	None
OC4PHF9552	EP	63FFFF-01	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2455(a)-Table 1.1.a.ii § 63.11(b) § 63.2450(b)	For each Group 1 continuous process vent, the owner or operator must reduce	[G]§ 63.115(d)(2)(v) § 63.115(d)(3)(iii) § 63.983(b) [G]§ 63.983(b)(1)	§ 63.2450(f)(2) § 63.2450(f)(2)(i) § 63.2450(f)(2)(ii) § 63.983(b)	§ 63.2450(f)(2)(ii) § 63.2450(q) § 63.997(b)(2) § 63.997(c)(3)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 63.2455(a) § 63.2455(b) § 63.2455(b)(1) § 63.982(b) § 63.983(a)(1) § 63.983(a)(2) § 63.983(d)(1) § 63.983(d)(1)(i) [G]§ 63.983(d)(2) § 63.983(d)(3) § 63.987(a) § 63.997(b)(2) § 63.997(b)(3) § 63.997(c)(3)	emissions of total organic HAP by venting emissions through a closed vent system to a flare.	[G]§ 63.983(b)(2) [G]§ 63.983(b)(3) [G]§ 63.983(c)(1) § 63.983(c)(2) § 63.983(c)(3) § 63.983(d)(1) § 63.983(d)(1)(ii) § 63.987(c) § 63.997(b) § 63.997(c)(2) § 63.997(c)(3) § 63.997(c)(3)(i) § 63.997(c)(3)(ii)	[G]§ 63.983(d)(2) § 63.987(c) § 63.998(a)(1)(ii) § 63.998(a)(1)(iii)(A) § 63.998(a)(1)(iii)(B) [G]§ 63.998(b)(1) [G]§ 63.998(b)(2) [G]§ 63.998(b)(3) [G]§ 63.998(b)(5) [G]§ 63.998(d)(1) § 63.998(d)(3)(i) § 63.998(d)(3)(ii) § 63.998(d)(5)	§ 63.998(a)(1)(iii)(A) [G]§ 63.998(b)(3) [G]§ 63.999(a)(1) § 63.999(b)(5) § 63.999(c)(1) § 63.999(c)(2)(i) § 63.999(c)(3) § 63.999(c)(6) [G]§ 63.999(c)(6)(i) § 63.999(c)(6)(iv) [G]§ 63.999(d)(1) [G]§ 63.999(d)(2)
OC4PHF956	EU	R1111-01	PM (OPACITY)	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(4)(A)	Visible emissions from a process gas flare shall not be permitted for more than five minutes in any two-hour period, except for upset emissions as provided in §101.11(a).	§ 111.111(a)(4)(A)(i) § 111.111(a)(4)(A)(ii)	§ 111.111(a)(4)(A)(ii)	None
OC4PHF956	EP	R5720-01	HIGHLY REACTIVE VOC	30 TAC Chapter 115, HRVOC Vent Gas	§ 115.727(d)	Any flare that at no time receives a total gas stream with greater than 100 ppmv HRVOC is exempt from the requirements of this division, with the exception of the recordkeeping requirements of §115.726(e)(3)(B) of this title.	None	§ 115.726(e)(3)(B) § 115.726(j)(2)	None

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
OC4PHF956	EP	R5121-01	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(2) § 115.121(a)(2) § 115.122(a)(2)(A) § 60.18	Any vent gas streams affected by §115.121(a)(2) of this title must be controlled properly with a control efficiency of at least 98% or to a VOC concentration of no more than 20 ppmv (on a dry basis corrected to 3.0% oxygen for combustion devices).	[G]§ 115.125 § 115.126(1) § 115.126(1)(B) § 115.126(2) § 115.126(7)	§ 115.126 § 115.126(1) § 115.126(1)(B) § 115.126(2)	None
OC4PHF956	CD	60A-01	OPACITY	40 CFR Part 60, Subpart A	§ 60.18(b) § 60.18(c)(1) § 60.18(c)(2) § 60.18(c)(3)(ii) § 60.18(c)(4)(iii) § 60.18(c)(6) § 60.18(e)	Flares shall comply with paragraphs (c)-(f) of § 60.18.	§ 60.18(d) § 60.18(f)(1) § 60.18(f)(2) § 60.18(f)(3) § 60.18(f)(4) § 60.18(f)(5)	None	None
OC4PHF956	CD	63A-01	112(B) HAPS	40 CFR Part 63, Subpart A	§ 63.11(b)(4) § 63.11(b)(1) § 63.11(b)(2) § 63.11(b)(3) § 63.11(b)(5) § 63.11(b)(6)(ii) § 63.11(b)(7)(iii)	Flares shall be designed and operated with no visible emissions, except for periods of a total of 5 minutes or less during any 2 consecutive hrs. Test Method 22 in App. A of part 60 of this chapter shall be used.	§ 63.11(b)(4) § 63.11(b)(5) § 63.11(b)(7)(i)	None	None
OC4PHF956	EP	63FFFF-01	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2455(a)-Table 1.1.a.ii § 63.11(b) § 63.2450(b)	For each Group 1 continuous process vent, the owner or operator must reduce	[G]§ 63.115(d)(2)(v) § 63.115(d)(3)(iii) § 63.983(b) [G]§ 63.983(b)(1)	§ 63.2450(f)(2) § 63.2450(f)(2)(i) § 63.2450(f)(2)(ii) § 63.983(b)	§ 63.2450(f)(2)(ii) § 63.2450(q) § 63.997(b)(2) § 63.997(c)(3)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 63.2455(a) § 63.2455(b) § 63.2455(b)(1) § 63.982(b) § 63.983(a)(1) § 63.983(a)(2) § 63.983(d)(1) § 63.983(d)(1)(i) [G]§ 63.983(d)(2) § 63.983(d)(3) § 63.987(a) § 63.997(b)(2) § 63.997(b)(3) § 63.997(c)(3)	emissions of total organic HAP by venting emissions through a closed vent system to a flare.	[G]§ 63.983(b)(2) [G]§ 63.983(b)(3) [G]§ 63.983(c)(1) § 63.983(c)(2) § 63.983(c)(3) § 63.983(d)(1) § 63.983(d)(1)(ii) § 63.987(c) § 63.997(b) § 63.997(c)(2) § 63.997(c)(3) § 63.997(c)(3)(i) § 63.997(c)(3)(ii)	[G]§ 63.983(d)(2) § 63.987(c) § 63.998(a)(1)(ii) § 63.998(a)(1)(iii)(A) § 63.998(a)(1)(iii)(B) [G]§ 63.998(b)(1) [G]§ 63.998(b)(2) [G]§ 63.998(b)(3) [G]§ 63.998(b)(5) [G]§ 63.998(d)(1) § 63.998(d)(3)(i) § 63.998(d)(3)(ii) § 63.998(d)(5)	§ 63.998(a)(1)(iii)(A) [G]§ 63.998(b)(3) [G]§ 63.999(a)(1) § 63.999(b)(5) § 63.999(c)(1) § 63.999(c)(2)(i) § 63.999(c)(3) § 63.999(c)(6) [G]§ 63.999(c)(6)(i) § 63.999(c)(6)(iv) [G]§ 63.999(d)(1) [G]§ 63.999(d)(2)
OC4PHF957	EU	R1111-01	PM (OPACITY)	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(4)(A)	Visible emissions from a process gas flare shall not be permitted for more than five minutes in any two-hour period, except for upset emissions as provided in §101.11(a).	§ 111.111(a)(4)(A)(i) § 111.111(a)(4)(A)(ii)	§ 111.111(a)(4)(A)(ii)	None
OC4PHF957	EP	R5720-01	HIGHLY REACTIVE VOC	30 TAC Chapter 115, HRVOC Vent Gas	§ 115.722(d) § 115.722(d)(1) § 115.722(d)(2) [G]§ 115.725(d)(1) § 115.725(d)(2) § 115.725(d)(2)(A)(i) [G]§ 115.725(d)(2)(A)(ii) § 115.725(d)(2)(A)(iii) § 115.725(d)(2)(A)(iv) § 115.725(d)(2)(B) § 115.725(d)(2)(B)(i) § 115.725(d)(2)(B)(ii)	All flares must continuously meet the requirements of 40 CFR § 60.18(c)(2)-(6) and (d) as amended through October 17, 2000 (65 FR 61744) when vent gas containing HRVOC is being routed to the flare.	[G]§ 115.725(d)(1) § 115.725(d)(2) § 115.725(d)(2)(A)(i) [G]§ 115.725(d)(2)(A)(ii) § 115.725(d)(2)(A)(iii) § 115.725(d)(2)(A)(iv) § 115.725(d)(2)(B) § 115.725(d)(2)(B)(i) § 115.725(d)(2)(B)(ii) § 115.725(d)(2)(B)(iii) § 115.725(d)(2)(B)(iv) § 115.725(d)(3) § 115.725(d)(4)	§ 115.726(a)(1) § 115.726(a)(1)(A) § 115.726(d)(1) § 115.726(d)(2) § 115.726(d)(3) § 115.726(d)(4) § 115.726(i) § 115.726(j)(1) § 115.726(j)(2)	§ 115.725(n) § 115.726(a)(1)(B)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.725(d)(2)(B)(iii) § 115.725(d)(2)(B)(iv) [G]§ 115.725(l) § 115.725(m)(2)(A) § 115.725(m)(2)(B)		§ 115.725(d)(5) § 115.725(d)(6) § 115.725(d)(7) [G]§ 115.725(l) § 115.725(m)(1) § 115.725(m)(2)(A) § 115.725(m)(2)(B) § 115.725(n)		
OC4PHF957	EP	R5121-01	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(1) § 115.121(a)(1) § 115.122(a)(1)(B) § 60.18	Vent gas streams affected by §115.121(a)(1) must be controlled properly with a control efficiency of at least 90% or to a volatile organic compound (VOC) concentration of no more than 20 parts per million (ppmv) (on a dry basis corrected to 3.0% oxygen for combustion devices).	[G]§ 115.125 § 115.126(1) § 115.126(1)(B) § 115.126(2)	§ 115.126 § 115.126(1) § 115.126(1)(B) § 115.126(2)	None
OC4PHF957	CD	60A-01	OPACITY	40 CFR Part 60, Subpart A	§ 60.18(b) § 60.18(c)(1) § 60.18(c)(2) § 60.18(c)(3)(ii) § 60.18(c)(4)(iii) § 60.18(c)(6) § 60.18(e)	Flares shall comply with paragraphs (c)-(f) of § 60.18.	§ 60.18(d) § 60.18(f)(1) § 60.18(f)(2) § 60.18(f)(3) § 60.18(f)(4) § 60.18(f)(5)	None	None
OC4PHF957	CD	63A-01	112(B) HAPS	40 CFR Part 63, Subpart A	§ 63.11(b)(4) § 63.11(b)(1) § 63.11(b)(2) § 63.11(b)(3) § 63.11(b)(5) § 63.11(b)(6)(ii)	Flares shall be designed and operated with no visible emissions, except for periods of a total of 5 minutes or	§ 63.11(b)(4) § 63.11(b)(5) § 63.11(b)(7)(i)	None	None

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 63.11(b)(7)(iii)	less during any 2 consecutive hrs. Test Method 22 in App. A of part 60 of this chapter shall be used.			
OC4PHF957	EP	63FFFF-01	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2455(a)-Table 1.1.a.ii § 63.11(b) § 63.2450(b) § 63.2455(a) § 63.2455(b) § 63.2455(b)(1) § 63.982(b) § 63.983(a)(1) § 63.983(a)(2) § 63.983(d)(1) § 63.983(d)(1)(i) [G]§ 63.983(d)(2) § 63.983(d)(3) § 63.987(a) § 63.997(b)(2) § 63.997(b)(3) § 63.997(c)(3)	For each Group 1 continuous process vent, the owner or operator must reduce emissions of total organic HAP by venting emissions through a closed vent system to a flare.	[G]§ 63.115(d)(2)(v) § 63.115(d)(3)(iii) § 63.983(b) [G]§ 63.983(b)(1) [G]§ 63.983(b)(2) [G]§ 63.983(b)(3) [G]§ 63.983(c)(1) § 63.983(c)(2) § 63.983(c)(3) § 63.983(d)(1) § 63.983(d)(1)(ii) § 63.987(c) § 63.997(b) § 63.997(c)(2) § 63.997(c)(3) § 63.997(c)(3)(i) § 63.997(c)(3)(ii)	§ 63.2450(f)(2) § 63.2450(f)(2)(i) § 63.2450(f)(2)(ii) § 63.983(b) [G]§ 63.983(d)(2) § 63.987(c) § 63.998(a)(1)(ii) § 63.998(a)(1)(iii)(A) § 63.998(a)(1)(iii)(B) [G]§ 63.998(b)(1) [G]§ 63.998(b)(2) [G]§ 63.998(b)(3) [G]§ 63.998(b)(5) [G]§ 63.998(d)(1) § 63.998(d)(3)(i) § 63.998(d)(3)(ii) § 63.998(d)(5)	§ 63.2450(f)(2)(ii) § 63.2450(q) § 63.997(b)(2) § 63.997(c)(3) § 63.998(a)(1)(iii)(A) [G]§ 63.998(b)(3) [G]§ 63.999(a)(1) § 63.999(b)(5) § 63.999(c)(1) § 63.999(c)(2)(i) § 63.999(c)(3) § 63.999(c)(6) [G]§ 63.999(c)(6)(i) § 63.999(c)(6)(iv) [G]§ 63.999(d)(1) [G]§ 63.999(d)(2)
OC4PHFU2	EU	R5780-ALL	HIGHLY REACTIVE VOC	30 TAC Chapter 115, HRVOC Fugitive Emissions	§ 115.787(d) § 115.780(b) [G]§ 115.781(a) § 115.782(a) § 115.782(b)(1) § 115.782(b)(2) § 115.782(c)(1) § 115.782(c)(1)(A) § 115.782(c)(1)(B) [G]§ 115.782(c)(1)(B)(i) § 115.782(c)(1)(B)(ii) [G]§	All pumps that are equipped with a shaft sealing system that prevents or detects emissions of VOC from the seal are exempt from the monitoring requirement of §115.781(b) and (c). Submerged pumps or sealless pumps may be used to satisfy the	§ 115.782(d)(2)	[G]§ 115.782(c)(1)(B)(i) [G]§ 115.786(c) § 115.786(d) § 115.786(d)(1) § 115.786(d)(2) § 115.786(d)(2)(A) § 115.786(d)(2)(B) § 115.786(d)(2)(C) § 115.786(e) § 115.786(g)	[G]§ 115.782(c)(1)(B)(i) § 115.783(3)(C) [G]§ 115.786(c)



### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					115.782(c)(1)(B)(iii) § 115.782(c)(1)(B)(iv) § 115.782(c)(1)(C)(i) § 115.782(c)(1)(C)(i)(I) § 115.782(c)(1)(C)(i)(II) § 115.782(c)(1)(C)(i)(III) § 115.782(c)(1)(C)(ii) § 115.783(3) [G]§ 115.783(3)(A) [G]§ 115.783(3)(B) § 115.787(b) § 115.787(b)(1) § 115.787(g)	requirements of this subsection.			
OC4PHFU2	EU	R5780-ALL	HIGHLY REACTIVE VOC	30 TAC Chapter 115, HRVOC Fugitive Emissions	§ 115.787(d) § 115.780(b) [G]§ 115.781(a) § 115.782(a) § 115.782(b)(1) § 115.782(b)(2) § 115.782(c)(1) § 115.782(c)(1)(A) § 115.782(c)(1)(B) [G]§ 115.782(c)(1)(B)(i) § 115.782(c)(1)(B)(ii) [G]§ 115.782(c)(1)(B)(iii) § 115.782(c)(1)(B)(iv) § 115.782(c)(1)(C)(i) § 115.782(c)(1)(C)(i)(I) § 115.782(c)(1)(C)(i)(II) § 115.782(c)(1)(C)(i)(III) § 115.782(c)(1)(C)(ii)	All compressors that are equipped with a shaft sealing system that prevents or detects emissions of VOC from the seal are exempt from the monitoring requirement of §115.781(b) and (c). Submerged pumps or sealless pumps may be used to satisfy the requirements of this subsection.	§ 115.782(d)(2)	[G]§ 115.782(c)(1)(B)(i) [G]§ 115.786(c) § 115.786(d) § 115.786(d)(1) § 115.786(d)(2) § 115.786(d)(2)(A) § 115.786(d)(2)(B) § 115.786(d)(2)(C) § 115.786(e) § 115.786(g)	[G]§ 115.782(c)(1)(B)(i) § 115.783(3)(C) [G]§ 115.786(c)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.783(3) [G]§ 115.783(3)(A) [G]§ 115.783(3)(B) § 115.787(b) § 115.787(b)(1) § 115.787(g)				
OC4PHFU2	EU	R5780-ALL	HIGHLY REACTIVE VOC	30 TAC Chapter 115, HRVOC Fugitive Emissions	§ 115.787(d) § 115.780(b) [G]§ 115.781(a) § 115.782(a) § 115.782(b)(1) § 115.782(b)(2) § 115.782(c)(1) § 115.782(c)(1)(A) § 115.782(c)(1)(B) [G]§ 115.782(c)(1)(B)(i) § 115.782(c)(1)(B)(ii) [G]§ 115.782(c)(1)(B)(iii) § 115.782(c)(1)(B)(iv) § 115.782(c)(1)(C)(i) § 115.782(c)(1)(C)(i)(I) § 115.782(c)(1)(C)(i)(II) § 115.782(c)(1)(C)(i)(III) § 115.782(c)(1)(C)(ii) § 115.783(3) [G]§ 115.783(3)(A) [G]§ 115.783(3)(B) § 115.787(b) § 115.787(b)(1) § 115.787(g)	All agitators that are equipped with a shaft sealing system that prevents or detects emissions of VOC from the seal are exempt from the monitoring requirement of §115.781(b) and (c). Submerged pumps or sealless pumps may be used to satisfy the requirements of this subsection.	§ 115.782(d)(2)	[G]§ 115.782(c)(1)(B)(i) [G]§ 115.786(c) § 115.786(d) § 115.786(d)(1) § 115.786(d)(2) § 115.786(d)(2)(A) § 115.786(d)(2)(B) § 115.786(d)(2)(C) § 115.786(e) § 115.786(g)	[G]§ 115.782(c)(1)(B)(i) § 115.783(3)(C) [G]§ 115.786(c)
OC4PHFU2	EU	R5780-ALL	HIGHLY REACTIVE	30 TAC Chapter 115,	§ 115.781(b)(9) § 115.780(b)	Process drains within a petroleum refinery;	§ 115.354(1) § 115.354(10)	§ 115.354(10) § 115.356	[G]§ 115.782(c)(1)(B)(i)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
			VOC	HRVOC Fugitive Emissions	[G]§ 115.781(a) § 115.781(g)(3) § 115.782(a) § 115.782(b)(1) § 115.782(b)(2) § 115.782(c)(1) § 115.782(c)(1)(A) § 115.782(c)(1)(B) [G]§ 115.782(c)(1)(B)(i) § 115.782(c)(1)(B)(ii) [G]§ 115.782(c)(1)(B)(iii) § 115.782(c)(1)(B)(iv) § 115.783(4)(A)(i) § 115.783(4)(A)(ii) § 115.783(4)(A)(ii)(I) § 115.783(4)(A)(ii)(II) § 115.783(4)(B) § 115.783(4)(B)(i) § 115.783(4)(B)(ii)	synthetic organic chemical, polymer, resin, or methyl-tert-butyl ether manufacturing process; or natural gas/gasoline processing operation in which a highly-reactive volatile organic compound is a raw material, intermediate, final product, or in a waste stream is subject to the requirements of this division. A leak is defined as a screening concentration greater than 500 ppmv above background as methane for all components.	§ 115.354(5) § 115.354(6) § 115.354(9) § 115.781(b) § 115.781(b)(10) § 115.781(b)(3) § 115.781(b)(4) § 115.781(b)(5) § 115.781(b)(6) § 115.781(b)(7) § 115.781(b)(7)(A) § 115.781(b)(7)(B) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.782(d)(2)	[G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5) § 115.781(b)(10) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.781(g)(3) [G]§ 115.782(c)(1)(B)(i) [G]§ 115.786(c) § 115.786(d) § 115.786(d)(1) § 115.786(d)(2) § 115.786(d)(2)(A) § 115.786(d)(2)(B) § 115.786(d)(2)(C) § 115.786(e) § 115.786(g)	[G]§ 115.786(c)
OC4PHFU2	EU	R5780-ALL	HIGHLY REACTIVE VOC	30 TAC Chapter 115, HRVOC Fugitive Emissions	§ 115.781(b)(9) § 115.780(b) [G]§ 115.781(a) § 115.781(g)(3) § 115.782(a) § 115.782(b)(1) § 115.782(b)(2) § 115.782(c)(1) § 115.782(c)(1)(A) § 115.782(c)(1)(B) [G]§ 115.782(c)(1)(B)(i) § 115.782(c)(1)(B)(ii) [G]§	Pressure relief valves (in gaseous service) within a petroleum refinery; synthetic organic chemical, polymer, resin, or methyl-tert-butyl ether manufacturing process; or natural gas/gasoline processing operation in which a highly-reactive volatile organic compound is a	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(4) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) § 115.781(b) § 115.781(b)(10) § 115.781(b)(4) § 115.781(b)(7) § 115.781(b)(7)(A) § 115.781(b)(7)(B)	§ 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5) § 115.781(b)(10) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.781(g)(3)	[G]§ 115.782(c)(1)(B)(i) [G]§ 115.786(c) § 115.788(c) [G]§ 115.788(d) § 115.788(e) [G]§ 115.788(g)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					115.782(c)(1)(B)(iii) § 115.782(c)(1)(B)(iv) § 115.787(e) § 115.787(f) § 115.787(g) § 115.788(a) § 115.788(a)(1) § 115.788(a)(2) § 115.788(a)(2)(A) § 115.788(a)(2)(B) § 115.788(a)(2)(C) § 115.788(a)(2)(C)(i) § 115.788(a)(2)(C)(ii) § 115.788(a)(2)(C)(iii) § 115.788(a)(2)(D) § 115.788(a)(3) § 115.788(a)(3)(A) § 115.788(a)(3)(B) [G]§ 115.788(g)	raw material, intermediate, final product, or in a waste stream is subject to the requirements of this division. A leak is defined as a screening concentration greater than 500 ppmv above background as methane for all components.	§ 115.781(b)(8) § 115.781(e) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.782(d)(2)	[G]§ 115.782(c)(1)(B)(i) [G]§ 115.786(c) § 115.786(d) § 115.786(d)(1) § 115.786(d)(2) § 115.786(d)(2)(A) § 115.786(d)(2)(B) § 115.786(d)(2)(C) § 115.786(e) § 115.786(g) [G]§ 115.788(g)	
OC4PHFU2	EU	R5780-ALL	HIGHLY REACTIVE VOC	30 TAC Chapter 115, HRVOC Fugitive Emissions	§ 115.781(b)(9) § 115.780(b) [G]§ 115.781(a) [G]§ 115.781(d) § 115.781(g)(3) § 115.782(a) § 115.782(b)(1) § 115.782(b)(2) § 115.782(c)(2) § 115.782(c)(2)(A) § 115.782(c)(2)(A)(i) § 115.782(c)(2)(A)(ii) § 115.782(c)(2)(B) § 115.783(1) § 115.783(1)(A) § 115.783(1)(B) § 115.783(5) § 115.787(f)	Bypass line valves within a petroleum refinery; synthetic organic chemical, polymer, resin, or methyl-tert-butyl ether manufacturing process; or natural gas/gasoline processing operation in which a highly-reactive volatile organic compound is a raw material, intermediate, final product, or in a waste stream is subject to the requirements of	§ 115.781(b) § 115.781(b)(10) § 115.781(b)(4) § 115.781(b)(7) § 115.781(b)(7)(A) § 115.781(b)(7)(B) [G]§ 115.781(d) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.782(d)(2) § 115.786(a)(1)	§ 115.781(b)(10) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.781(g)(3) § 115.782(c)(2)(A)(ii) § 115.786(a)(1) § 115.786(a)(2) § 115.786(a)(2)(A) § 115.786(a)(2)(B) § 115.786(b)(1) § 115.786(b)(2) § 115.786(b)(2)(A) § 115.786(b)(2)(B) § 115.786(b)(2)(C) [G]§ 115.786(b)(3) [G]§ 115.786(c) § 115.786(d)	§ 115.782(c)(2)(A)(ii) [G]§ 115.786(c) § 115.788(c) [G]§ 115.788(d) § 115.788(e) [G]§ 115.788(g)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements  (30 TAC § 122.144)	Reporting Requirements  (30 TAC § 122.145)
					§ 115.787(f)(4) § 115.787(g) § 115.788(a) § 115.788(a)(1) § 115.788(a)(2) § 115.788(a)(2)(A) § 115.788(a)(2)(B) § 115.788(a)(2)(C) § 115.788(a)(2)(C)(i) § 115.788(a)(2)(C)(ii) § 115.788(a)(2)(C)(iii) § 115.788(a)(2)(D) § 115.788(a)(3) § 115.788(a)(3)(A) § 115.788(a)(3)(B) [G]§ 115.788(g)	this division. A leak is defined as a screening concentration greater than 500 ppmv above background as methane for all components.		§ 115.786(d)(2) § 115.786(d)(2)(C) § 115.786(e) § 115.786(g) [G]§ 115.788(g)	
OC4PHFU2	EU	R5780-ALL	HIGHLY REACTIVE VOC	30 TAC Chapter 115, HRVOC Fugitive Emissions	§ 115.781(b)(9) § 115.780(b) [G]§ 115.781(a) § 115.781(g)(3) § 115.782(a) § 115.782(b)(1) § 115.782(b)(2) § 115.782(c)(2) § 115.782(c)(2)(A) § 115.782(c)(2)(A)(i) § 115.782(c)(2)(A)(ii) § 115.782(c)(2)(B) § 115.783(5) § 115.787(f) § 115.787(f)(4) § 115.787(g) § 115.788(a) § 115.788(a)(1) § 115.788(a)(2) § 115.788(a)(2)(A) § 115.788(a)(2)(B)	Valves within a petroleum refinery; synthetic organic chemical, polymer, resin, or methyl-tert-butyl ether manufacturing process; or natural gas/gasoline processing operation which a highly-reactive volatile organic compound is a raw material, intermediate, final product, or in a waste stream is subject to the requirements of this division. A leak is defined as a screening concentration greater	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) § 115.781(b) § 115.781(b)(10) § 115.781(b)(4) § 115.781(b)(7) § 115.781(b)(7)(A) § 115.781(b)(7)(B) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.781(g)(3) § 115.781(g)(1) § 115.781(g)(2) § 115.782(d)(2)	§ 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5) § 115.781(b)(10) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.781(g)(3) § 115.782(c)(2)(A)(ii) [G]§ 115.786(c) § 115.786(d) § 115.786(d)(2) § 115.786(d)(2)(C) § 115.786(e) § 115.786(g)	§ 115.782(c)(2)(A)(ii) [G]§ 115.786(c) § 115.788(c) [G]§ 115.788(d) § 115.788(e) [G]§ 115.788(g)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.788(a)(2)(C) § 115.788(a)(2)(C)(i) § 115.788(a)(2)(C)(ii) § 115.788(a)(2)(C)(iii) § 115.788(a)(2)(D) § 115.788(a)(3) § 115.788(a)(3)(A) § 115.788(a)(3)(B) [G]§ 115.788(g)	than 500 ppmv above background as methane for all components.		[G]§ 115.788(g)	
OC4PHFU2	EU	R5780-ALL	HIGHLY REACTIVE VOC	30 TAC Chapter 115, HRVOC Fugitive Emissions	§ 115.781(b)(9) § 115.780(b) [G]§ 115.781(a) § 115.781(g)(3) § 115.782(a) § 115.782(b)(1) § 115.782(b)(2) § 115.782(c)(1) § 115.782(c)(1)(A) § 115.782(c)(1)(B) [G]§ 115.782(c)(1)(B)(i) § 115.782(c)(1)(B)(ii) [G]§ 115.782(c)(1)(B)(iii) § 115.782(c)(1)(B)(iv)	Flanges or other connectors within a petroleum refinery; synthetic organic chemical, polymer, resin, or methyl-tert-butyl ether manufacturing process; or natural gas/gasoline processing operation in which a highly-reactive volatile organic compound is a raw material, intermediate, final product, or in a waste stream is subject to the requirements of this division. A leak is defined as a screening concentration greater than 500 ppmv above background as methane for all components.	§ 115.354(1) § 115.354(10) § 115.354(11) § 115.354(3) § 115.354(5) § 115.354(6) § 115.354(9) § 115.781(b) § 115.781(b)(10) § 115.781(b)(3) § 115.781(b)(4) § 115.781(b)(7) § 115.781(b)(7)(A) § 115.781(b)(7)(B) § 115.781(f) § 115.781(f)(1) § 115.781(f)(2) § 115.781(f)(3) § 115.781(f)(4) § 115.781(f)(5) § 115.781(f)(6) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.782(d)(2) § 115.781(B)	§ 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5) § 115.781(b)(10) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.781(g)(3) [G]§ 115.782(c)(1)(B)(i) [G]§ 115.786(c) § 115.786(d) § 115.786(d)(1) § 115.786(d)(2) § 115.786(d)(2)(A) § 115.786(d)(2)(B) § 115.786(d)(2)(C) § 115.786(e) § 115.786(g)	[G]§ 115.782(c)(1)(B)(i) [G]§ 115.786(c) § 115.789(1)(B)
OC4PHFU2	EU	R5780-	HIGHLY	30 TAC	§ 115.781(b)(9)	Compressor seals	§ 115.354(1)	§ 115.354(10)	[G]§

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Processes Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
		ALL	REACTIVE VOC	Chapter 115, HRVOC Fugitive Emissions	§ 115.780(b) [G]§ 115.781(a) § 115.781(g)(3) § 115.782(a) § 115.782(b)(1) § 115.782(b)(2) § 115.782(c)(1) § 115.782(c)(1)(A) § 115.782(c)(1)(B) [G]§ 115.782(c)(1)(B)(i) § 115.782(c)(1)(B)(ii) [G]§ 115.782(c)(1)(B)(iii) § 115.782(c)(1)(B)(iv) § 115.782(c)(1)(C)(i) § 115.782(c)(1)(C)(i)(I) § 115.782(c)(1)(C)(i)(II) § 115.782(c)(1)(C)(i)(III) § 115.782(c)(1)(C)(ii) § 115.783(3) [G]§ 115.783(3)(A) [G]§ 115.783(3)(B) § 115.787(b)	within a petroleum refinery; synthetic organic chemical, polymer, resin, or methyl-tert-butyl ether manufacturing process; or natural gas/gasoline processing operation in which a highly-reactive volatile organic compound is a raw material, intermediate, final product, or in a waste stream is subject to the requirements of this division. A leak is defined as a screening concentration greater than 500 ppmv above background as methane for all components.	§ 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) § 115.781(b) § 115.781(b)(10) § 115.781(b)(4) § 115.781(b)(7) § 115.781(b)(7)(A) § 115.781(b)(7)(B) § 115.781(c)(1) § 115.781(c)(2) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.781(g)(3) [G]§ 115.782(c)(1)(B)(i) [G]§ 115.786(c) § 115.786(d) § 115.786(d)(1) § 115.786(d)(2) § 115.786(d)(2)(A) § 115.786(d)(2)(B) § 115.786(d)(2)(C) § 115.786(e) § 115.786(g)	115.782(c)(1)(B)(i) § 115.783(3)(C) [G]§ 115.786(c)	
OC4PHFU2	EU	R5780-ALL	HIGHLY REACTIVE VOC	30 TAC Chapter 115, HRVOC Fugitive Emissions	§ 115.781(b)(9) § 115.780(b) [G]§ 115.781(a) § 115.781(g)(3) § 115.782(a) § 115.782(b)(1) § 115.782(b)(2) § 115.782(c)(1) § 115.782(c)(1)(A) § 115.782(c)(1)(B) [G]§	Pump seals within a petroleum refinery; synthetic organic chemical, polymer, resin, or methyl-tert-butyl ether manufacturing process; or natural gas/gasoline processing operation in which a highly-	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) § 115.781(b) § 115.781(b)(10) § 115.781(b)(4) § 115.781(b)(7) § 115.781(b)(7)(A)	§ 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5) § 115.781(b)(10) § 115.781(g)	[G]§ 115.782(c)(1)(B)(i) § 115.783(3)(C) [G]§ 115.786(c)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					115.782(c)(1)(B)(i) § 115.782(c)(1)(B)(ii) [G]§ 115.782(c)(1)(B)(iii) § 115.782(c)(1)(B)(iv) § 115.782(c)(1)(C)(i) § 115.782(c)(1)(C)(i)(I) § 115.782(c)(1)(C)(i)(II) § 115.782(c)(1)(C)(i)(III) § 115.782(c)(1)(C)(ii) § 115.783(3) [G]§ 115.783(3)(A) [G]§ 115.783(3)(B) § 115.787(b) § 115.787(b)(1)	reactive volatile organic compound is a raw material, intermediate, final product, or in a waste stream is subject to the requirements of this division. A leak is defined as a screening concentration greater than 500 ppmv above background as methane for all components.	§ 115.781(b)(7)(B) § 115.781(c)(1) § 115.781(c)(2) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.782(d)(2)	§ 115.781(g)(1) § 115.781(g)(2) § 115.781(g)(3) [G]§ 115.782(c)(1)(B)(i) [G]§ 115.786(c) § 115.786(d) § 115.786(d)(1) § 115.786(d)(2) § 115.786(d)(2)(A) § 115.786(d)(2)(B) § 115.786(d)(2)(C) § 115.786(e) § 115.786(g)	
OC4PHFU2	EU	R5780-ALL	HIGHLY REACTIVE VOC	30 TAC Chapter 115, HRVOC Fugitive Emissions	§ 115.781(b)(9) § 115.780(b) [G]§ 115.781(a) § 115.781(g)(3) § 115.782(a) § 115.782(b)(1) § 115.782(b)(2) § 115.782(c)(1) § 115.782(c)(1)(A) § 115.782(c)(1)(B) [G]§ 115.782(c)(1)(B)(i) § 115.782(c)(1)(B)(ii) [G]§ 115.782(c)(1)(B)(iii) § 115.782(c)(1)(B)(iv) § 115.782(c)(1)(C)(i) § 115.782(c)(1)(C)(i)(I) § 115.782(c)(1)(C)(i)(II)	Agitators within a petroleum refinery; synthetic organic chemical, polymer, resin, or methyl-tert-butyl ether manufacturing process; or natural gas/gasoline processing operation in which a highly-reactive volatile organic compound is a raw material, intermediate, final product, or in a waste stream is subject to the requirements of this division. A leak is defined as a screening	§ 115.354(1) § 115.354(10) § 115.354(5) § 115.354(6) § 115.354(9) § 115.781(b) § 115.781(b)(10) § 115.781(b)(3) § 115.781(b)(4) § 115.781(b)(7) § 115.781(b)(7)(A) § 115.781(b)(7)(B) § 115.781(c)(1) § 115.781(c)(2) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.781(g)(3) [G]§ 115.782(c)(1)(B)(i) [G]§ 115.786(c) § 115.786(d) § 115.786(d)(1) § 115.786(d)(2)	§ 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5) § 115.781(b)(10) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.781(g)(3) [G]§ 115.782(c)(1)(B)(i) [G]§ 115.786(c) § 115.786(d) § 115.786(d)(1) § 115.786(d)(2)	[G]§ 115.782(c)(1)(B)(i) § 115.783(3)(C) [G]§ 115.786(c)



### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.782(c)(1)(C)(i)(III) § 115.782(c)(1)(C)(ii) § 115.783(3) [G]§ 115.783(3)(A) [G]§ 115.783(3)(B) § 115.787(b)	concentration greater than 500 ppmv above background as methane for all components.		§ 115.786(d)(2)(A) § 115.786(d)(2)(B) § 115.786(d)(2)(C) § 115.786(e) § 115.786(g)	
OC4PHFU2	EU	R5780-ALL	HIGHLY REACTIVE VOC	30 TAC Chapter 115, HRVOC Fugitive Emissions	§ 115.781(b)(9) § 115.780(b) [G]§ 115.781(a) § 115.781(g)(3) § 115.782(a) § 115.782(b)(1) § 115.782(b)(2) § 115.782(c)(1) § 115.782(c)(1)(A) § 115.782(c)(1)(B) [G]§ 115.782(c)(1)(B)(i) § 115.782(c)(1)(B)(ii) [G]§ 115.782(c)(1)(B)(iii) § 115.782(c)(1)(B)(iv)	Heat exchanger heads, sight glasses, meters, gauges, sampling connections, bolted manways, hatches, sump covers, junction box vents, and covers and seals on VOC water separators within the process unit or processes listed in §115.780(a) in which a HRVOC is a raw material, intermediate, final product, or in a waste stream is subject to the requirements of this division. A leak is defined as a screening concentration greater than 500 ppmv above background as methane for all components.	§ 115.781(b) § 115.781(b)(10) § 115.781(b)(3) § 115.781(b)(4) § 115.781(b)(7) § 115.781(b)(7)(A) § 115.781(b)(7)(B) § 115.781(f) § 115.781(f)(1) § 115.781(f)(2) § 115.781(f)(3) § 115.781(f)(4) § 115.781(f)(5) § 115.781(f)(6) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.782(d)(2) § 115.789(1)(B)	§ 115.781(b)(10) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.781(g)(3) [G]§ 115.782(c)(1)(B)(i) [G]§ 115.786(c) § 115.786(d) § 115.786(d)(1) § 115.786(d)(2) § 115.786(d)(2)(A) § 115.786(d)(2)(B) § 115.786(d)(2)(C) § 115.786(e) § 115.786(g)	[G]§ 115.782(c)(1)(B)(i) [G]§ 115.786(c) § 115.789(1)(B)
OC4PHFU2	EU	R5780-ALL	HIGHLY REACTIVE VOC	30 TAC Chapter 115, HRVOC Fugitive	§ 115.781(b)(9) § 115.358(c)(1) [G]§ 115.358(h) § 115.780(b)	Components within the process unit or processes listed in §115.780(a) is subject	§ 115.354(1) § 115.354(11) § 115.354(13)(A) § 115.354(13)(B)	§ 115.354(13)(D) § 115.354(13)(E) § 115.356 [G]§ 115.356(1)	[G]§ 115.358(g) [G]§ 115.782(c)(1)(B)(i) [G]§ 115.786(c)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
				Emissions	[G]§ 115.781(a) § 115.781(g)(3) § 115.782(a) § 115.782(b)(2) § 115.782(b)(3) § 115.782(c)(1) § 115.782(c)(1)(A) § 115.782(c)(1)(B) [G]§ 115.782(c)(1)(B)(i) § 115.782(c)(1)(B)(ii) [G]§ 115.782(c)(1)(B)(iii) § 115.782(c)(1)(B)(iv)	to the requirements of this division. If the owner of operator elects to use the alternative work practice in §115.358 of this title, a leak is defined as specified in §115.358 of this title, including any leak detected using the alternative work practice on a component that is subject to the requirements of this division but not specifically selected for alternative work practice monitoring.	§ 115.354(13)(C) § 115.354(13)(D) § 115.354(13)(E) § 115.354(13)(F) § 115.354(4) § 115.354(5) § 115.354(9) § 115.358(c)(2) § 115.358(d) [G]§ 115.358(e) § 115.358(f) § 115.781(b) § 115.781(b)(4) § 115.781(b)(7) § 115.781(b)(7)(A) § 115.781(b)(7)(B) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.781(h)(1) § 115.781(h)(2) § 115.781(h)(3) § 115.781(h)(4) § 115.781(h)(5) [G]§ 115.781(h)(6) § 115.782(b)(4) § 115.782(d)(1) § 115.788(h)(1) [G]§ 115.788(h)(2) § 115.788(h)(3)	[G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) [G]§ 115.356(4) § 115.356(5) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.781(g)(3) [G]§ 115.782(c)(1)(B)(i) [G]§ 115.786(c) § 115.786(d) § 115.786(d)(1) § 115.786(d)(2) § 115.786(d)(2)(A) § 115.786(d)(2)(B) § 115.786(d)(2)(C) § 115.786(e) [G]§ 115.786(f) § 115.786(g)	
OC4PHFU2	EU	R5780-ALL	HIGHLY REACTIVE VOC	30 TAC Chapter 115, HRVOC Fugitive Emissions	§ 115.781(b)(9) § 115.780(b) [G]§ 115.781(a) § 115.781(g)(3) § 115.782(a) § 115.782(b)(1) § 115.782(b)(2)	Open-ended valves or lines within a petroleum refinery; synthetic organic chemical, polymer, resin, or methyl-tert-butyl ether	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9)	§ 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B)	§ 115.782(c)(2)(A)(ii) [G]§ 115.786(c) § 115.788(c) [G]§ 115.788(d) § 115.788(e) [G]§ 115.788(g) § 115.789(1)(B)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.782(c)(2) § 115.782(c)(2)(A) § 115.782(c)(2)(A)(i) § 115.782(c)(2)(A)(ii) § 115.782(c)(2)(B) § 115.783(5) § 115.787(f) § 115.787(f)(2) § 115.787(f)(3) § 115.787(f)(4) § 115.787(g) § 115.788(a) § 115.788(a)(1) § 115.788(a)(2) § 115.788(a)(2)(A) § 115.788(a)(2)(B) § 115.788(a)(2)(C) § 115.788(a)(2)(C)(i) § 115.788(a)(2)(C)(ii) § 115.788(a)(2)(C)(iii) § 115.788(a)(2)(D) § 115.788(a)(3) § 115.788(a)(3)(A) § 115.788(a)(3)(B) [G]§ 115.788(g)	manufacturing process; or natural gas/gasoline processing operation in which a highly-reactive volatile organic compound is a raw material, intermediate, final product, or in a waste stream is subject to the requirements of this division. A leak is defined as a screening concentration greater than 500 ppmv above background as methane for all components.	§ 115.781(b) § 115.781(b)(10) § 115.781(b)(3) § 115.781(b)(4) § 115.781(b)(7) § 115.781(b)(7)(A) § 115.781(b)(7)(B) § 115.781(f) § 115.781(f)(1) § 115.781(f)(2) § 115.781(f)(3) § 115.781(f)(4) § 115.781(f)(5) § 115.781(f)(6) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.782(d)(2) § 115.789(1)(B)	[G]§ 115.356(3)(C) § 115.356(5) § 115.781(b)(10) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.781(g)(3) § 115.782(c)(2)(A)(ii) [G]§ 115.786(c) § 115.786(d) § 115.786(d)(2) § 115.786(d)(2)(C) § 115.786(e) § 115.786(g) [G]§ 115.788(g)	
OC4PHFU2	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(6)	Components at a petroleum refinery or synthetic organic chemical, polymer, resin, or methyl-tert-butyl ether manufacturing process, that contact a process fluid that contains less than 10% VOC by weight and components at a	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						natural gas/gasoline processing operation that contact a process fluid that contains less than 1.0% VOC by weight are exempt from the requirements of this division except §115.356(3)(C) of this title.			
OC4PHFU2	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(5)	Reciprocating compressors and positive displacement pumps used in natural gas/gasoline processing operations are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
OC4PHFU2	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(10)	Instrumentation systems, as defined in 40 CFR §63.161 (January 17, 1997), that meet 40 CFR §63.169 (June 20, 1996) are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
OC4PHFU2	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(11)	Sampling connection systems, as defined in 40 CFR §63.161 (January 17, 1997),	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						that meet the requirements of 40 CFR §63.166(a) and (b) (June 20, 1996) are exempt from the requirements of this division except §115.356(3)(C) of this title.			
OC4PHFU2	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(13)	Components/systems that contact a process fluid containing VOC having a true vapor pressure equal to or less than 0.002 psia at 68 degrees Fahrenheit are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
OC4PHFU2	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(2) § 115.352(9)	Each pressure relief valve equipped with a rupture disk must comply with §115.352(9) and §115.356(3)(C).	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
OC4PHFU2	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.353(a) § 115.353(b) § 115.910	For all affected persons in the Beaumont-Port Arthur, Dallas-Fort Worth, El Paso, and Houston-Galveston areas, as defined in §115.10, any alternate methods of demonstrating and	None	None	None

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						documenting continuous compliance with the applicable control requirements or exemption criteria in this division may be approved by the executive director in accordance with §115.910 if emission reductions are demonstrated to be substantially equivalent.			
OC4PHFU2	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(C) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.352(8) § 115.357(8) § 115.358(c)(1) [G]§ 115.358(h)	No component shall be allowed to have a VOC leak, for more than 15 days, after discovery. If the owner or operator elects to use the alternative work practice in §115.358 of this title, any leak detected as defined in §115.358 of this title, including any leak detected using the alternative work practice on a component that is subject to the requirements of this division but not specifically selected for alternative work	§ 115.354(1) § 115.354(11) § 115.354(13)(A) § 115.354(13)(B) § 115.354(13)(C) § 115.354(13)(D) § 115.354(13)(E) § 115.354(13)(F) § 115.354(4) § 115.354(5) § 115.354(9) [G]§ 115.355 § 115.358(c)(2) § 115.358(d) [G]§ 115.358(e) § 115.358(f)	§ 115.352(7) § 115.354(13)(D) § 115.354(13)(E) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) [G]§ 115.356(4) § 115.356(5)	[G]§ 115.358(g)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						practice monitoring.			
OC4PHFU2	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(3) § 115.352(7) § 115.357(1)	No process drains shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
OC4PHFU2	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(3) § 115.352(7)	No process drains shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) § 115.356(5)	None
OC4PHFU2	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3)	No pressure relief valves shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater	§ 115.354(1) § 115.354(2) § 115.354(4) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.352(5) § 115.352(7) § 115.352(9) § 115.357(1) § 115.357(8) § 115.357(9)	than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	[G]§ 115.355 § 115.357(1)		
OC4PHFU2	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(9) § 115.357(12) § 115.357(8) § 115.357(9)	No pressure relief valves shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(4) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)
OC4PHFU2	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(1) § 115.357(8) § 115.357(9)	No open-ended valves or lines shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(2) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)



### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
OC4PHFU2	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(12) § 115.357(8) § 115.357(9)	No open-ended valves or lines shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)
OC4PHFU2	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(1) § 115.357(8) § 115.357(9)	No valves shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(2) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)
OC4PHFU2	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3)	No valves shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9)	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A)	[G]§ 115.354(7)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(12) § 115.357(8) § 115.357(9)	than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	[G]§ 115.355	§ 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	
OC4PHFU2	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(8) § 115.357(1) § 115.357(12) § 115.357(8)	No flanges or other connectors shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(11) § 115.354(3) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
OC4PHFU2	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(8) § 115.357(12) § 115.357(8)	No flanges or other connectors shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on	§ 115.354(1) § 115.354(10) § 115.354(11) § 115.354(3) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						sight, smell, or sound.			
OC4PHFU2	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(7) § 115.357(1) § 115.357(12) § 115.357(8)	No agitators shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
OC4PHFU2	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(7) § 115.357(1) § 115.357(12) § 115.357(8)	No agitators shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
OC4PHFU2	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(7) § 115.357(1) § 115.357(12) § 115.357(8)	No agitators shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater	§ 115.354(1) § 115.354(10) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A)	None

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(7) § 115.357(12) § 115.357(8)	than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.		§ 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	
OC4PHFU2	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(3) § 115.357(8)	No compressor seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	[G]§ 115.355	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	None
OC4PHFU2	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(4) § 115.357(8)	No compressor seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	[G]§ 115.355	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	None
OC4PHFU2	EU	R5352-	VOC	30 TAC	§ 115.352(1)(B)	No compressor seals	§ 115.354(1)	§ 115.352(7)	None

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
		ALL		Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(1) § 115.357(8)	shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	
OC4PHFU2	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(12) § 115.357(8)	No compressor seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
OC4PHFU2	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii)	No pump seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume	[G]§ 115.355	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	None

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.352(3) § 115.352(5) § 115.352(7) § 115.357(4) § 115.357(8)	above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.			
OC4PHFU2	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(1) § 115.357(8)	No pump seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	None
OC4PHFU2	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(12) § 115.357(8)	No pump seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
OC4PHFU2	EU	60VVa-01	VOC	40 CFR Part 60, Subpart VVa	§ 60.480a(e)(2)(i) § 60.480a(e)(2)(ii) § 60.482-1a(a)	Owners or operators may choose to comply with the provisions of	[G]§ 60.485a(d) [G]§ 60.485a(e)	§ 60.486a(i) § 60.486a(i)(1) § 60.486a(i)(2)	None

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 60.482-1a(b) § 60.485a(f) § 60.486a(a)(1) § 60.486a(a)(2) § 60.486a(k)	40 CFR Part 63, Subpart H, to satisfy the requirements of §§60.482-1a through 60.487a for an affected facility. When choosing to comply with 40 CFR Part 63, Subpart H, the requirements of §60.485a(d), (e), and (f), and §60.486a(i) and (j) still apply.		§ 60.486a(i)(3)	
OC4PHFU2	EU	63FFF-01	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2480(a) The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart FFFF	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart FFFF	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart FFFF	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart FFFF	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart FFFF
OC4PHFU2	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	§ 63.162(e) § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h)	Equipment that is in organic HAP service less than 300 hours per year is excluded from the requirements of §§63.163 - 63.174 and §63.178 if it is identified as required in §63.181(j).	[G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(i) § 63.181(j)	[G]§ 63.182(a) [G]§ 63.182(b)
OC4PHFU2	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.164 § 63.162(a) § 63.162(c) [G]§ 63.162(f)	Standards: Compressors. §63.164(a)-(i)	[G]§ 63.164 [G]§ 63.180(b) [G]§ 63.180(c) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					[G]§ 63.162(g) § 63.162(h) [G]§ 63.171			[G]§ 63.181(f)	§ 63.182(c)(4) [G]§ 63.182(d)
OC4PHFU2	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.165 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Pressure relief device in gas/vapor service. §63.165(a)-(d)	[G]§ 63.165 [G]§ 63.180(b) [G]§ 63.180(c) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(f)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
OC4PHFU2	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.166 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Sampling connection systems. §63.166(a)-(c)	[G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
OC4PHFU2	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Pumps in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
OC4PHFU2	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Valves in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
OC4PHFU2	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) [G]§ 63.162(h) [G]§ 63.171	Standards: Connectors in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4)



### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 63.162(h) [G]§ 63.171				[G]§ 63.182(d)
OC4PHFU2	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Agitators in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
OC4PHFU2	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Instrumentation systems. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
OC4PHFU2	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Pressure relief devices in liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
OC4PHFU2	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	§ 63.170 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Surge control vessels and bottom receivers.	[G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
OC4PHFU2	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.173 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g)	Standards: Agitators gas/vapor service and in light liquid service. §63.173(a)-(j).	[G]§ 63.173 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 63.162(h) [G]§ 63.171				[G]§ 63.182(d)
OC4PHFU2	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.174 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Connectors in gas/vapor service and in light liquid service. §63.174(a)-(j)	[G]§ 63.174 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
OC4PHFU2	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.163 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.176	Standards: Pumps in light liquid service. §63.163(a)-(j)	[G]§ 63.163 [G]§ 63.176 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) § 63.181(h) [G]§ 63.181(h)(3) § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7) § 63.181(h)(8)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
OC4PHFU2	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.167 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.175	Standards: Open-ended valves or lines. §63.167(a)-(e).	[G]§ 63.175 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) § 63.181(h) [G]§ 63.181(h)(1) [G]§ 63.181(h)(2) § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
OC4PHFU2	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.168 § 63.162(a) § 63.162(c) [G]§ 63.162(f)	Standards: Valves in gas/vapor service and in light liquid service. §63.168(a)-(j)	[G]§ 63.168 [G]§ 63.175 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					[G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.175			§ 63.181(h) [G]§ 63.181(h)(1) [G]§ 63.181(h)(2) § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7)	§ 63.182(c)(4) [G]§ 63.182(d)
OC4PHGE001	EP	R1111-01	PM (OPACITY)	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(B) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 20% averaged over a six minute period for any source on which construction was begun after January 31, 1972.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None
OC4PHGE001	EU	R71CI-01	EXEMPT	30 TAC Chapter 117, Subchapter B	[G]§ 117.303(a)(10) [G]§ 117.310(f)	Units exempted from the provisions of this division, except as specified in §§117.310(f), 117.340(j), 117.345(f)(6) and (10), 117.350(c)(1), and 117.354(a)(5), include any stationary diesel engine placed into service before October 1, 2001, that operates less than 100 hours per year, based on a rolling 12-month average; and has not been modified, reconstructed, or	None	§ 117.340(j) [G]§ 117.345(f)(10) [G]§ 117.345(f)(6)	None

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						relocated on or after October 1, 2001. §117.303(a)(10)(A)-(B)			
OC4PHGE001	EU	63ZZZZ-01	Exempt	40 CFR Part 63, Subpart ZZZZ	§ 63.6590(b)(1) § 63.6595(c) § 63.6640(f)(1) [G]§ 63.6640(f)(2) § 63.6640(f)(3)	An affected source which meets either of the criteria in paragraphs §63.6590(b)(1)(i)-(ii) of this section does not have to meet the requirements of this subpart and of subpart A of this part except for the initial notification requirements of §63.6645(f).	None	None	§ 63.6645(c) § 63.6645(f)
OC4PHGE860	EP	R1111-01	PM (OPACITY)	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(B) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 20% averaged over a six minute period for any source on which construction was begun after January 31, 1972.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None
OC4PHGE860	EU	R71CI-01	EXEMPT	30 TAC Chapter 117, Subchapter B	[G]§ 117.303(a)(11) [G]§ 117.310(f)	Units exempted from the provisions of this division except as specified in §§117.310(f), 117.340(j), 117.345(f)(6) and (10), 117.350(c)(1) and 117.354(a)(5) include	None	§ 117.340(j) [G]§ 117.345(f)(10) [G]§ 117.345(f)(6)	None

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						new, modified, reconstructed, or relocated stationary diesel engine placed into service on or after October 1, 2001, that operates less than 100 hours per year, based on a rolling 12-month average, in other than emergency situations; and meets the requirements for non-road engines as specified. §117.303(a)(11)(A)-(B)			
OC4PHGE860	EU	60III-01	CO	40 CFR Part 60, Subpart III	§ 60.4205(b) § 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218 § 89.112(a)	Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power greater than or equal to 130 KW and less than or equal to 2237 KW and a displacement of less than 10 liters per cylinder and is a 2007 model year and later must comply with a CO emission limit of 3.5 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and 40 CFR 89.112(a).	None	None	[G]§ 60.4214(d)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
OC4PHGE860	EU	60III-01	NMHC and NO <sub>x</sub>	40 CFR Part 60, Subpart III	§ 60.4205(b) § 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218 § 89.112(a)	Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power greater than or equal to 75 KW and less than or equal to 560 KW and a displacement of less than 10 liters per cylinder and is a 2007 model year and later must comply with an NMHC+NO <sub>x</sub> emission limit of 4.0 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and 40 CFR 89.112(a).	None	None	[G]§ 60.4214(d)
OC4PHGE860	EU	60III-01	PM	40 CFR Part 60, Subpart III	§ 60.4205(b) § 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218 § 89.112(a)	Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power greater than or equal to 130 KW and less than or equal to 2237 KW and a displacement of less than 10 liters per cylinder and is a 2007 model year and later must comply with a PM emission limit of 0.20 g/KW-hr, as	None	None	[G]§ 60.4214(d)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						stated in 40 CFR 60.4202(a)(2) and 40 CFR 89.112(a).			
OC4PHGE860	EU	63ZZZZ-01	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6590(c)	Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines as applicable. No further requirements apply for such engines under this part.	None	None	None
OC4PHH310	EP	R1111-01	PM (OPACITY)	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(B) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 20% averaged over a six minute period for any source on which construction was begun after January 31, 1972.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None
OC4PHH310	EP	R5720-01	HIGHLY	30 TAC	§ 115.727(f)	All sites that are	§ 115.725(a)	§ 115.726(b)(1)	[G]§ 115.725(a)(4)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements  (30 TAC § 122.144)	Reporting Requirements  (30 TAC § 122.145)
			REACTIVE VOC	Chapter 115, HRVOC Vent Gas	§ 115.725(a)(2)(A) § 115.725(a)(2)(B) § 115.725(a)(2)(C) § 115.725(a)(2)(D) § 115.725(a)(3) [G]§ 115.725(a)(4) [G]§ 115.725(l) [G]§ 115.726(a)(2)	subject to this division and that are located in the Houston/Galveston/Brazoria area as defined in §115.10 of this title (relating to Definitions), excluding Harris County, are exempt from § 115.722(b) and (c)(2) of this title, except as provided in § 115.729(a)(3) of this title (relating to Counties and Compliance Schedules).	§ 115.725(a)(2)(A) § 115.725(a)(2)(B) § 115.725(a)(2)(C) § 115.725(a)(2)(D) § 115.725(a)(3) § 115.725(a)(3)(B) [G]§ 115.725(a)(4) § 115.725(a)(5) [G]§ 115.725(l) § 115.725(n)	§ 115.726(b)(2) § 115.726(b)(3) § 115.726(i) § 115.726(j)(1) § 115.726(j)(2)	§ 115.725(a)(5) § 115.725(n) [G]§ 115.726(a)(2)
OC4PHH310	EP	R5121-01	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(2) § 115.121(a)(2) § 115.122(a)(2)(B)	Any vent gas streams affected by §115.121(a)(2) of this title must be controlled properly with a control efficiency of at least 98% or to a VOC concentration of no more than 20 ppmv (on a dry basis corrected to 3.0% oxygen for combustion devices).	[G]§ 115.125 § 115.126(1) § 115.126(1)(C) § 115.126(2) ** See Periodic Monitoring Summary	§ 115.126 § 115.126(1) § 115.126(1)(C) § 115.126(2)	None
OC4PHH310	EU	R7ICI-01	NO <sub>x</sub>	30 TAC Chapter 117, Subchapter B	§ 117.310(d)(3) § 117.310(a) § 117.310(a)(8)(A)(i) § 117.310(b)	An owner or operator may not use the alternative methods specified in §§	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(c)	§ 117.345(a) § 117.345(f) § 117.345(f)(1) [G]§ 117.345(f)(2)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c)



### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					[G]§ 117.310(e)(1) § 117.310(e)(2) [G]§ 117.310(e)(3) § 117.310(e)(4) § 117.340(f)(1) § 117.340(l)(2) § 117.340(p)(1) § 117.340(p)(3)	117.315, 117.323 and 117.9800 to comply with the NO <sub>x</sub> emission specifications but shall use the mass emissions cap and trade program in Chapter 101, Subchapter H, Division 3, except that electric generating facilities must also comply with the daily and 30-day system cap emission limitations of § 117.320. An owner or operator may use the alternative methods specified in § 117.9800 to comply with § 117.320.	§ 117.335(d) § 117.335(f) § 117.335(g) § 117.340(a) § 117.340(b)(1) § 117.340(b)(3) § 117.340(c)(1) [G]§ 117.340(c)(3) [G]§ 117.340(f)(2) § 117.340(l)(2) § 117.340(o)(1) § 117.340(p)(1) § 117.8100(a) § 117.8100(a)(1) § 117.8100(a)(1)(A) § 117.8100(a)(1)(B) § 117.8100(a)(1)(B)(i) § 117.8100(a)(1)(B)(ii) § 117.8100(a)(1)(C) § 117.8100(a)(2) [G]§ 117.8100(a)(3) § 117.8100(a)(4) § 117.8100(a)(5) § 117.8100(a)(5)(A) § 117.8100(a)(5)(B) [G]§ 117.8100(a)(5)(D) [G]§ 117.8100(a)(5)(E) § 117.8100(a)(6)	§ 117.345(f)(8) § 117.345(f)(9) § 117.8100(a)(5)(C)	§ 117.345(d) § 117.345(d)(3) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) § 117.8010(2)(C) § 117.8010(2)(D) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8) § 117.8100(c)
OC4PHH310	EU	R7ICI-01	CO	30 TAC Chapter 117, Subchapter B	§ 117.310(c)(1) § 117.310(c)(1)(A) § 117.310(c)(3) § 117.340(f)(1)	CO emissions must not exceed 400 ppmv at 3.0% O <sub>2</sub> , dry basis.	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(c) § 117.335(d) § 117.335(f) § 117.335(f)(3) § 117.335(g) § 117.340(a)	§ 117.345(a) § 117.345(f) § 117.345(f)(1) [G]§ 117.345(f)(2) § 117.345(f)(7) § 117.345(f)(8) § 117.345(f)(9) § 117.8100(a)(5)(C)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.345(d) § 117.345(d)(2) § 117.345(d)(3) § 117.345(d)(4) § 117.345(d)(5)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
							§ 117.340(b)(1) § 117.340(b)(3) § 117.340(e) [G]§ 117.340(f)(2) § 117.8100(a) § 117.8100(a)(1) § 117.8100(a)(1)(A) § 117.8100(a)(1)(B) § 117.8100(a)(1)(B)(ii) § 117.8100(a)(1)(B)(iii) § 117.8100(a)(1)(C) § 117.8100(a)(2) [G]§ 117.8100(a)(3) § 117.8100(a)(4) § 117.8100(a)(5) § 117.8100(a)(5)(A) § 117.8100(a)(5)(B) [G]§ 117.8100(a)(5)(D) [G]§ 117.8100(a)(5)(E) § 117.8100(a)(6) § 117.8120 § 117.8120(1) § 117.8120(1)(A)		§ 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8) § 117.8100(c)
OC4PHH310	EP	63FFFF-01	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2455(a)-Table 1.1.a.i § 63.2450(b) § 63.2455(a) § 63.2455(b) § 63.2455(b)(1) § 63.982(c) § 63.982(c)(2) § 63.983(a)(1) § 63.983(a)(2) § 63.983(d)(1) § 63.983(d)(1)(i) [G]§ 63.983(d)(2) § 63.983(d)(3)	For each Group 1 continuous process vent, the owner or operator must reduce emissions to an outlet process concentration less than or equal to 20 ppmv as organic HAP or TOC by venting emissions through a closed-vent system to any combination of control devices	[G]§ 63.115(d)(2)(v) § 63.115(d)(3)(iii) § 63.2450(g) § 63.2450(g)(1) § 63.2450(g)(2) [G]§ 63.2450(g)(3) § 63.2450(g)(4) § 63.2450(k)(6) § 63.983(b) [G]§ 63.983(b)(1) [G]§ 63.983(b)(2) [G]§ 63.983(b)(3) [G]§ 63.983(c)(1) § 63.983(c)(2)	§ 63.2450(k)(6) § 63.2525(g) § 63.2525(h) § 63.983(b) [G]§ 63.983(d)(2) § 63.996(c)(2)(ii) § 63.998(a)(2)(ii)(B)(5) [G]§ 63.998(b)(1) [G]§ 63.998(b)(2) [G]§ 63.998(b)(3) [G]§ 63.998(b)(5) [G]§ 63.998(c)(1) § 63.998(c)(2)(iii) § 63.998(c)(3)(iii)	§ 63.2450(q) § 63.996(b)(2) § 63.996(c)(6) § 63.997(c)(3) [G]§ 63.998(b)(3) [G]§ 63.999(a)(1) [G]§ 63.999(b)(3) § 63.999(b)(5) § 63.999(c)(1) § 63.999(c)(2)(i) § 63.999(c)(6) [G]§ 63.999(c)(6)(i) § 63.999(c)(6)(iv)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 63.988(a)(1) § 63.988(a)(2) § 63.988(a)(3) § 63.988(b)(2) § 63.996(c)(1) § 63.996(c)(2) § 63.996(c)(2)(i) § 63.996(c)(3) § 63.996(c)(4) § 63.996(c)(5) § 63.996(c)(6) § 63.997(c)(3)	(except flare).	§ 63.983(c)(3) § 63.983(d)(1) § 63.983(d)(1)(ii) § 63.996(b)(1) § 63.996(b)(1)(i) § 63.996(b)(2) § 63.997(c)(2) § 63.997(c)(3) § 63.997(c)(3)(iii)	[G]§ 63.998(d)(1) § 63.998(d)(3)(i) § 63.998(d)(3)(ii) § 63.998(d)(5)	
OC4PHH320	EP	R1111-01	PM (OPACITY)	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(B) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 20% averaged over a six minute period for any source on which construction was begun after January 31, 1972.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None
OC4PHH320	EP	R5720-01	HIGHLY REACTIVE VOC	30 TAC Chapter 115, HRVOC Vent Gas	§ 115.727(f) § 115.725(a)(2)(A) § 115.725(a)(2)(B) § 115.725(a)(2)(C) § 115.725(a)(2)(D) § 115.725(a)(3) [G]§ 115.725(a)(4) [G]§ 115.725(l) [G]§ 115.726(a)(2)	All sites that are subject to this division and that are located in the Houston/Galveston/Brazoria area as defined in §115.10 of this title (relating to Definitions), excluding Harris County, are exempt from § 115.722(b) and (c)(2) of this title, except as provided in §	§ 115.725(a) § 115.725(a)(2)(A) § 115.725(a)(2)(B) § 115.725(a)(2)(C) § 115.725(a)(2)(D) § 115.725(a)(3) § 115.725(a)(3)(B) [G]§ 115.725(a)(4) § 115.725(a)(5) [G]§ 115.725(l) § 115.725(n)	§ 115.726(b)(1) § 115.726(b)(2) § 115.726(b)(3) § 115.726(i) § 115.726(j)(1) § 115.726(j)(2)	[G]§ 115.725(a)(4) § 115.725(a)(5) § 115.725(n) [G]§ 115.726(a)(2)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						115.729(a)(3) of this title (relating to Counties and Compliance Schedules).			
OC4PHH320	EP	R5121-01	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(2) § 115.121(a)(2) § 115.122(a)(2)(B)	Any vent gas streams affected by §115.121(a)(2) of this title must be controlled properly with a control efficiency of at least 98% or to a VOC concentration of no more than 20 ppmv (on a dry basis corrected to 3.0% oxygen for combustion devices).	[G]§ 115.125 § 115.126(1) § 115.126(1)(C) § 115.126(2) ** See Periodic Monitoring Summary	§ 115.126 § 115.126(1) § 115.126(1)(C) § 115.126(2)	None
OC4PHH320	EU	R7ICI-01	NO <sub>x</sub>	30 TAC Chapter 117, Subchapter B	§ 117.310(d)(3) § 117.310(a) § 117.310(a)(8)(A)(i) § 117.310(b) [G]§ 117.310(e)(1) § 117.310(e)(2) [G]§ 117.310(e)(3) § 117.310(e)(4) § 117.340(f)(1) § 117.340(l)(2) § 117.340(p)(1) § 117.340(p)(3)	An owner or operator may not use the alternative methods specified in §§ 117.315, 117.323 and 117.9800 to comply with the NO <sub>x</sub> emission specifications but shall use the mass emissions cap and trade program in Chapter 101, Subchapter H, Division 3, except that electric generating facilities must also comply with the daily	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(c) § 117.335(d) § 117.335(f) § 117.335(g) § 117.340(a) § 117.340(b)(1) § 117.340(b)(3) § 117.340(c)(1) [G]§ 117.340(c)(3) [G]§ 117.340(f)(2) § 117.340(l)(2) § 117.340(o)(1) § 117.340(p)(1) § 117.8100(a)	§ 117.345(a) § 117.345(f) § 117.345(f)(1) [G]§ 117.345(f)(2) § 117.345(f)(8) § 117.345(f)(9) § 117.8100(a)(5)(C)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.345(d) § 117.345(d)(3) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) § 117.8010(2)(C) § 117.8010(2)(D) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						and 30-day system cap emission limitations of § 117.320. An owner or operator may use the alternative methods specified in § 117.9800 to comply with § 117.320.	§ 117.8100(a)(1) § 117.8100(a)(1)(A) § 117.8100(a)(1)(B) § 117.8100(a)(1)(B)(i) § 117.8100(a)(1)(B)(ii) § 117.8100(a)(1)(C) § 117.8100(a)(2) [G]§ 117.8100(a)(3) § 117.8100(a)(4) § 117.8100(a)(5) § 117.8100(a)(5)(A) § 117.8100(a)(5)(B) [G]§ 117.8100(a)(5)(D) [G]§ 117.8100(a)(5)(E) § 117.8100(a)(6)		[G]§ 117.8010(7) [G]§ 117.8010(8) § 117.8100(c)
OC4PHH320	EU	R7ICI-01	CO	30 TAC Chapter 117, Subchapter B	§ 117.310(c)(1) § 117.310(c)(1)(A) § 117.310(c)(3) § 117.340(f)(1)	CO emissions must not exceed 400 ppmv at 3.0% O <sub>2</sub> , dry basis.	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(c) § 117.335(d) § 117.335(f) § 117.335(f)(3) § 117.335(g) § 117.340(a) § 117.340(b)(1) § 117.340(b)(3) § 117.340(e) [G]§ 117.340(f)(2) § 117.8100(a) § 117.8100(a)(1) § 117.8100(a)(1)(A) § 117.8100(a)(1)(B) § 117.8100(a)(1)(B)(ii) § 117.8100(a)(1)(B)(iii) § 117.8100(a)(1)(C) § 117.8100(a)(2) [G]§ 117.8100(a)(3)	§ 117.345(a) § 117.345(f) § 117.345(f)(1) [G]§ 117.345(f)(2) § 117.345(f)(7) § 117.345(f)(8) § 117.345(f)(9) § 117.8100(a)(5)(C)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.345(d) § 117.345(d)(2) § 117.345(d)(3) § 117.345(d)(4) § 117.345(d)(5) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8) § 117.8100(c)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
							§ 117.8100(a)(4) § 117.8100(a)(5) § 117.8100(a)(5)(A) § 117.8100(a)(5)(B) [G]§ 117.8100(a)(5)(D) [G]§ 117.8100(a)(5)(E) § 117.8100(a)(6) § 117.8120 § 117.8120(1) § 117.8120(1)(A)		
OC4PHH320	EP	63FFFF-01	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2455(a)-Table 1.1.a.i § 63.2450(b) § 63.2455(a) § 63.2455(b) § 63.2455(b)(1) § 63.982(c) § 63.982(c)(2) § 63.983(a)(1) § 63.983(a)(2) § 63.983(d)(1) § 63.983(d)(1)(i) [G]§ 63.983(d)(2) § 63.983(d)(3) § 63.988(a)(1) § 63.988(a)(2) § 63.988(a)(3) § 63.988(b)(2) § 63.996(c)(1) § 63.996(c)(2) § 63.996(c)(2)(i) § 63.996(c)(3) § 63.996(c)(4) § 63.996(c)(5) § 63.996(c)(6) § 63.997(c)(3)	For each Group 1 continuous process vent, the owner or operator must reduce emissions to an outlet process concentration less than or equal to 20 ppmv as organic HAP or TOC by venting emissions through a closed-vent system to any combination of control devices (except flare).	[G]§ 63.115(d)(2)(v) § 63.115(d)(3)(iii) § 63.2450(g) § 63.2450(g)(1) § 63.2450(g)(2) [G]§ 63.2450(g)(3) § 63.2450(g)(4) § 63.2450(k)(6) § 63.983(b) [G]§ 63.983(b)(1) [G]§ 63.983(b)(2) [G]§ 63.983(b)(3) [G]§ 63.983(c)(1) § 63.983(c)(2) § 63.983(c)(3) § 63.983(d)(1) § 63.983(d)(1)(ii) § 63.996(b)(1) § 63.996(b)(1)(i) § 63.996(b)(2) § 63.997(c)(2) § 63.997(c)(3) § 63.997(c)(3)(iii)	§ 63.2450(k)(6) § 63.2525(g) § 63.2525(h) § 63.983(b) [G]§ 63.983(d)(2) § 63.996(c)(2)(ii) § 63.998(a)(2)(ii)(B)(5) [G]§ 63.998(b)(1) [G]§ 63.998(b)(2) [G]§ 63.998(b)(3) [G]§ 63.998(b)(5) [G]§ 63.998(c)(1) § 63.998(c)(2)(iii) § 63.998(c)(3)(iii) [G]§ 63.998(d)(1) § 63.998(d)(3)(i) § 63.998(d)(3)(ii) § 63.998(d)(5)	§ 63.2450(q) § 63.996(b)(2) § 63.996(c)(6) § 63.997(c)(3) [G]§ 63.998(b)(3) [G]§ 63.999(a)(1) [G]§ 63.999(b)(3) § 63.999(b)(5) § 63.999(c)(1) § 63.999(c)(2)(i) § 63.999(c)(6) [G]§ 63.999(c)(6)(i) § 63.999(c)(6)(iv)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
OC4PHH330	EP	R1111-01	PM (OPACITY)	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(B) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 20% averaged over a six minute period for any source on which construction was begun after January 31, 1972.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None
OC4PHH330	EP	R5720-01	HIGHLY REACTIVE VOC	30 TAC Chapter 115, HRVOC Vent Gas	§ 115.727(f) § 115.725(a)(2)(A) § 115.725(a)(2)(B) § 115.725(a)(2)(C) § 115.725(a)(2)(D) § 115.725(a)(3) [G]§ 115.725(a)(4) [G]§ 115.725(l) [G]§ 115.726(a)(2)	All sites that are subject to this division and that are located in the Houston/Galveston/Brazoria area as defined in §115.10 of this title (relating to Definitions), excluding Harris County, are exempt from § 115.722(b) and (c)(2) of this title, except as provided in § 115.729(a)(3) of this title (relating to Counties and Compliance Schedules).	§ 115.725(a) § 115.725(a)(2)(A) § 115.725(a)(2)(B) § 115.725(a)(2)(C) § 115.725(a)(2)(D) § 115.725(a)(3) § 115.725(a)(3)(B) [G]§ 115.725(a)(4) § 115.725(a)(5) [G]§ 115.725(l) § 115.725(n)	§ 115.726(b)(1) § 115.726(b)(2) § 115.726(b)(3) § 115.726(i) § 115.726(j)(1) § 115.726(j)(2)	[G]§ 115.725(a)(4) § 115.725(a)(5) § 115.725(n) [G]§ 115.726(a)(2)
OC4PHH330	EP	R5121-01	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(2) § 115.121(a)(2) § 115.122(a)(2)(B)	Any vent gas streams affected by §115.121(a)(2) of this title must be controlled properly with a control efficiency of at least	[G]§ 115.125 § 115.126(1) § 115.126(1)(C) § 115.126(2) ** See Periodic Monitoring Summary	§ 115.126 § 115.126(1) § 115.126(1)(C) § 115.126(2)	None

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						98% or to a VOC concentration of no more than 20 ppmv (on a dry basis corrected to 3.0% oxygen for combustion devices).			
OC4PHH330	EU	R7ICI-01	CO	30 TAC Chapter 117, Subchapter B	§ 117.310(c)(1) § 117.310(c)(1)(A) § 117.310(c)(3) § 117.340(f)(1)	CO emissions must not exceed 400 ppmv at 3.0% O <sub>2</sub> , dry basis.	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(c) § 117.335(d) § 117.335(f) § 117.335(f)(3) § 117.335(g) § 117.340(a) § 117.340(e) [G]§ 117.340(f)(2) § 117.8100(a) § 117.8100(a)(1) § 117.8100(a)(1)(A) § 117.8100(a)(1)(B) § 117.8100(a)(1)(B)(iii) § 117.8100(a)(1)(B)(iii) § 117.8100(a)(1)(C) § 117.8100(a)(2) [G]§ 117.8100(a)(3) § 117.8100(a)(4) § 117.8100(a)(5) § 117.8100(a)(5)(A) § 117.8100(a)(5)(B) [G]§ 117.8100(a)(5)(D) [G]§ 117.8100(a)(5)(E) § 117.8100(a)(6) § 117.8120 § 117.8120(1) § 117.8120(1)(A)	§ 117.345(a) § 117.345(f) § 117.345(f)(1) [G]§ 117.345(f)(2) § 117.345(f)(7) § 117.345(f)(8) § 117.345(f)(9) § 117.8100(a)(5)(C)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.345(d) § 117.345(d)(2) § 117.345(d)(3) § 117.345(d)(4) § 117.345(d)(5) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8) § 117.8100(c)



### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
OC4PHH330	EP	63FFFF-01	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2455(a)-Table 1.1.a.i § 63.2450(b) § 63.2455(a) § 63.2455(b) § 63.2455(b)(1) § 63.982(c) § 63.982(c)(2) § 63.983(a)(1) § 63.983(a)(2) § 63.983(d)(1) § 63.983(d)(1)(i) [G]§ 63.983(d)(2) § 63.983(d)(3) § 63.988(a)(1) § 63.988(a)(2) § 63.988(a)(3) § 63.988(b)(2) § 63.996(c)(1) § 63.996(c)(2) § 63.996(c)(2)(i) § 63.996(c)(3) § 63.996(c)(4) § 63.996(c)(5) § 63.996(c)(6) § 63.997(c)(3)	For each Group 1 continuous process vent, the owner or operator must reduce emissions to an outlet process concentration less than or equal to 20 ppmv as organic HAP or TOC by venting emissions through a closed-vent system to any combination of control devices (except flare).	[G]§ 63.115(d)(2)(v) § 63.115(d)(3)(iii) § 63.2450(g) § 63.2450(g)(1) § 63.2450(g)(2) [G]§ 63.2450(g)(3) § 63.2450(g)(4) § 63.2450(k)(6) § 63.983(b) § 63.983(b)(1) [G]§ 63.983(b)(1) [G]§ 63.983(b)(2) [G]§ 63.983(b)(3) [G]§ 63.983(c)(1) § 63.983(c)(2) § 63.983(c)(3) § 63.983(d)(1) § 63.983(d)(1)(ii) § 63.996(b)(1) § 63.996(b)(1)(i) § 63.996(b)(2) § 63.997(c)(2) § 63.997(c)(3) § 63.997(c)(3)(iii)	§ 63.2450(k)(6) § 63.2525(g) § 63.2525(h) § 63.983(b) [G]§ 63.983(d)(2) § 63.996(c)(2)(ii) § 63.998(a)(2)(ii)(B)(5) [G]§ 63.998(b)(1) [G]§ 63.998(b)(2) [G]§ 63.998(b)(3) [G]§ 63.998(b)(5) [G]§ 63.998(c)(1) § 63.998(c)(2)(iii) § 63.998(c)(3)(iii) [G]§ 63.998(d)(1) § 63.998(d)(3)(i) § 63.998(d)(3)(ii) § 63.998(d)(5)	§ 63.2450(q) § 63.996(b)(2) § 63.996(c)(6) § 63.997(c)(3) [G]§ 63.998(b)(3) [G]§ 63.999(a)(1) [G]§ 63.999(b)(3) § 63.999(b)(5) § 63.999(c)(1) § 63.999(c)(2)(i) § 63.999(c)(6) [G]§ 63.999(c)(6)(i) § 63.999(c)(6)(iv)
OC4PHH340	EP	R1111-01	PM (OPACITY)	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(B) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 20% averaged over a six minute period for any source on which construction was begun after January 31, 1972.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
OC4PHH340	EP	R5720-01	HIGHLY REACTIVE VOC	30 TAC Chapter 115, HRVOC Vent Gas	§ 115.727(f) § 115.725(a)(2)(A) § 115.725(a)(2)(B) § 115.725(a)(2)(C) § 115.725(a)(2)(D) § 115.725(a)(3) [G]§ 115.725(a)(4) [G]§ 115.725(l) [G]§ 115.726(a)(2)	All sites that are subject to this division and that are located in the Houston/Galveston/Brazoria area as defined in §115.10 of this title (relating to Definitions), excluding Harris County, are exempt from § 115.722(b) and (c)(2) of this title, except as provided in § 115.729(a)(3) of this title (relating to Counties and Compliance Schedules).	§ 115.725(a) § 115.725(a)(2)(A) § 115.725(a)(2)(B) § 115.725(a)(2)(C) § 115.725(a)(2)(D) § 115.725(a)(3) § 115.725(a)(3)(B) [G]§ 115.725(a)(4) § 115.725(a)(5) [G]§ 115.725(l) § 115.725(n)	§ 115.726(b)(1) § 115.726(b)(2) § 115.726(b)(3) § 115.726(i) § 115.726(j)(1) § 115.726(j)(2)	[G]§ 115.725(a)(4) § 115.725(a)(5) § 115.725(n) [G]§ 115.726(a)(2)
OC4PHH340	EP	R5121-01	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(2) § 115.121(a)(2) § 115.122(a)(2)(B)	Any vent gas streams affected by §115.121(a)(2) of this title must be controlled properly with a control efficiency of at least 98% or to a VOC concentration of no more than 20 ppmv (on a dry basis corrected to 3.0% oxygen for combustion devices).	[G]§ 115.125 § 115.126(1) § 115.126(1)(C) § 115.126(2) ** See Periodic Monitoring Summary	§ 115.126 § 115.126(1) § 115.126(1)(C) § 115.126(2)	None
OC4PHH340	EU	R7ICI-01	NO <sub>x</sub>	30 TAC Chapter 117, Subchapter B	§ 117.310(d)(3) § 117.310(a) § 117.310(a)(8)(A)(i)	An owner or operator may not use the alternative methods	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b)	§ 117.345(a) § 117.345(f) § 117.345(f)(1)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 117.310(b) [G]§ 117.310(e)(1) § 117.310(e)(2) [G]§ 117.310(e)(3) § 117.310(e)(4) § 117.340(f)(1) § 117.340(l)(2) § 117.340(p)(1) § 117.340(p)(3)	specified in §§ 117.315, 117.323 and 117.9800 to comply with the NO <sub>x</sub> emission specifications but shall use the mass emissions cap and trade program in Chapter 101, Subchapter H, Division 3, except that electric generating facilities must also comply with the daily and 30-day system cap emission limitations of § 117.320. An owner or operator may use the alternative methods specified in § 117.9800 to comply with § 117.320.	§ 117.335(c) § 117.335(d) § 117.335(f) § 117.335(g) § 117.340(a) § 117.340(b)(1) § 117.340(b)(3) § 117.340(c)(1) [G]§ 117.340(c)(3) [G]§ 117.340(f)(2) § 117.340(l)(2) § 117.340(o)(1) § 117.340(p)(1) § 117.8100(a) § 117.8100(a)(1) § 117.8100(a)(1)(A) § 117.8100(a)(1)(B) § 117.8100(a)(1)(B)(i) § 117.8100(a)(1)(B)(ii) § 117.8100(a)(1)(C) § 117.8100(a)(2) [G]§ 117.8100(a)(3) § 117.8100(a)(4) § 117.8100(a)(5) § 117.8100(a)(5)(A) § 117.8100(a)(5)(B) [G]§ 117.8100(a)(5)(D) [G]§ 117.8100(a)(5)(E) § 117.8100(a)(6)	[G]§ 117.345(f)(2) § 117.345(f)(8) § 117.345(f)(9) § 117.8100(a)(5)(C)	[G]§ 117.345(c) § 117.345(d) § 117.345(d)(3) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) § 117.8010(2)(C) § 117.8010(2)(D) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8) § 117.8100(c)
OC4PHH340	EU	R7ICI-01	CO	30 TAC Chapter 117, Subchapter B	§ 117.310(c)(1) § 117.310(c)(1)(A) § 117.310(c)(3) § 117.340(f)(1)	CO emissions must not exceed 400 ppmv at 3.0% O <sub>2</sub> , dry basis.	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(c) § 117.335(d) § 117.335(f) § 117.335(f)(3) § 117.335(g)	§ 117.345(a) § 117.345(f) § 117.345(f)(1) [G]§ 117.345(f)(2) § 117.345(f)(7) § 117.345(f)(8) § 117.345(f)(9) § 117.8100(a)(5)(C)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.345(d) § 117.345(d)(2) § 117.345(d)(3) § 117.345(d)(4)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
							§ 117.340(a) § 117.340(b)(1) § 117.340(b)(3) § 117.340(e) [G]§ 117.340(f)(2) § 117.8100(a) § 117.8100(a)(1) § 117.8100(a)(1)(A) § 117.8100(a)(1)(B) § 117.8100(a)(1)(B)(ii) § 117.8100(a)(1)(B)(iii) § 117.8100(a)(1)(C) § 117.8100(a)(2) [G]§ 117.8100(a)(3) § 117.8100(a)(4) § 117.8100(a)(5) § 117.8100(a)(5)(A) § 117.8100(a)(5)(B) [G]§ 117.8100(a)(5)(D) [G]§ 117.8100(a)(5)(E) § 117.8100(a)(6) § 117.8120 § 117.8120(1) § 117.8120(1)(A)		§ 117.345(d)(5) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8) § 117.8100(c)
OC4PHH340	EP	63FFFF-01	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2455(a)-Table 1.1.a.i § 63.2450(b) § 63.2455(a) § 63.2455(b) § 63.2455(b)(1) § 63.982(c) § 63.982(c)(2) § 63.983(a)(1) § 63.983(a)(2) § 63.983(d)(1) § 63.983(d)(1)(i) [G]§ 63.983(d)(2)	For each Group 1 continuous process vent, the owner or operator must reduce emissions to an outlet process concentration less than or equal to 20 ppmv as organic HAP or TOC by venting emissions through a closed-vent system to any combination of	[G]§ 63.115(d)(2)(v) § 63.115(d)(3)(iii) § 63.2450(g) § 63.2450(g)(1) § 63.2450(g)(2) [G]§ 63.2450(g)(3) § 63.2450(g)(4) § 63.2450(k)(6) § 63.983(b) [G]§ 63.983(b)(1) [G]§ 63.983(b)(2) [G]§ 63.983(b)(3) [G]§ 63.983(c)(1)	§ 63.2450(k)(6) § 63.2525(g) § 63.2525(h) § 63.983(b) [G]§ 63.983(d)(2) § 63.996(c)(2)(ii) § 63.998(a)(2)(ii)(B)(5) [G]§ 63.998(b)(1) [G]§ 63.998(b)(2) [G]§ 63.998(b)(3) [G]§ 63.998(b)(5) [G]§ 63.998(c)(1) § 63.998(c)(2)(iii)	§ 63.2450(q) § 63.996(b)(2) § 63.996(c)(6) § 63.997(c)(3) [G]§ 63.998(b)(3) [G]§ 63.999(a)(1) [G]§ 63.999(b)(3) § 63.999(b)(5) § 63.999(c)(1) § 63.999(c)(2)(i) § 63.999(c)(6) [G]§ 63.999(c)(6)(i) § 63.999(c)(6)(iv)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 63.983(d)(3) § 63.988(a)(1) § 63.988(a)(2) § 63.988(a)(3) § 63.988(b)(2) § 63.996(c)(1) § 63.996(c)(2) § 63.996(c)(2)(i) § 63.996(c)(3) § 63.996(c)(4) § 63.996(c)(5) § 63.996(c)(6) § 63.997(c)(3)	control devices (except flare).	§ 63.983(c)(2) § 63.983(c)(3) § 63.983(d)(1) § 63.983(d)(1)(ii) § 63.996(b)(1) § 63.996(b)(1)(i) § 63.996(b)(2) § 63.997(c)(2) § 63.997(c)(3) § 63.997(c)(3)(iii)	§ 63.998(c)(3)(iii) [G]§ 63.998(d)(1) § 63.998(d)(3)(i) § 63.998(d)(3)(ii) § 63.998(d)(5)	
OC4PHLR1	EU	R5211-01	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.213(b) § 115.212(a)(3)(B) § 115.212(a)(3)(E) § 115.213(b)(1) § 115.213(b)(4) [G]§ 115.213(b)(6) § 115.214(a)(1)(B) § 115.214(a)(1)(D) § 115.214(a)(1)(D)(ii)	General loading - 90% overall control option in the covered non-attainment counties. As an alternative operations may elect to achieve a 90% overall control of emissions at the account.	§ 115.212(a)(3)(B) § 115.213(b) § 115.213(b)(1) § 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.215 § 115.215(1) § 115.215(10) [G]§ 115.215(2) § 115.215(4) § 115.215(9)	§ 115.213(b)(1) § 115.216 § 115.216(2) § 115.216(3)(A) § 115.216(3)(A)(i) § 115.216(3)(A)(ii) § 115.216(3)(A)(iii) § 115.216(3)(B)	§ 115.213(b)(1) § 115.213(b)(2) § 115.213(b)(3) § 115.213(b)(4)
OC4PHLR7	EU	R5211-01	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(a)(1) § 115.214(a)(1)(B) § 115.214(a)(1)(D) § 115.214(a)(1)(D)(i)	Vapor pressure (at land-based operations). All land-based loading and unloading of VOC with a true vapor pressure less than 0.5 psia is exempt from the requirements of this division, except as specified.	§ 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.215 § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None
OC4PHMEHFP	EP	R5720-01	HIGHLY	30 TAC	§ 115.727(f)	All sites that are	§ 115.725(a)	§ 115.726(b)(1)	[G]§ 115.725(a)(4)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
			REACTIVE VOC	Chapter 115, HRVOC Vent Gas	§ 115.725(a)(1)(A) § 115.725(a)(1)(B) § 115.725(a)(1)(C) § 115.725(a)(3) [G]§ 115.725(a)(4) [G]§ 115.725(l) [G]§ 115.726(a)(2)	subject to this division and that are located in the Houston/Galveston/Brazoria area as defined in §115.10 of this title (relating to Definitions), excluding Harris County, are exempt from § 115.722(b) and (c)(2) of this title, except as provided in § 115.729(a)(3) of this title (relating to Counties and Compliance Schedules).	§ 115.725(a)(1)(A) § 115.725(a)(1)(B) § 115.725(a)(1)(C) § 115.725(a)(3) § 115.725(a)(3)(B) [G]§ 115.725(a)(4) § 115.725(a)(5) [G]§ 115.725(l) § 115.725(n)	§ 115.726(b)(2) § 115.726(b)(3) § 115.726(i) § 115.726(j)(1) § 115.726(j)(2)	§ 115.725(a)(5) § 115.725(n) [G]§ 115.726(a)(2)
OC4PHO470	EP	R1111-01	PM (OPACITY)	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(B) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 20% averaged over a six minute period for any source on which construction was begun after January 31, 1972.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None
OC4PHPV450	EP	63FFFF-01	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2505(a)(1) § 63.2505 § 63.2505(a)(1)(ii) § 63.2505(a)(2) § 63.2505(b) § 63.2505(b)(1) § 63.2535(h) § 63.983(a)(1)	You must route vent streams through a closed-vent system to a control device that reduces HAP emissions as specified in either §63.2505(a)(1)(i) or (ii).	§ 63.2450(g) § 63.2450(g)(1) § 63.2450(g)(2) [G]§ 63.2450(g)(3) § 63.2450(g)(4) § 63.2505(b) § 63.983(b) [G]§ 63.983(b)(1)	§ 63.2505(b) § 63.983(b) [G]§ 63.983(d)(2) [G]§ 63.998(d)(1)	§ 63.2505(b) § 63.2505(b)(5) § 63.999(c)(2)(i)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 63.983(a)(2) § 63.983(d)(1) § 63.983(d)(1)(i) [G]§ 63.983(d)(2) § 63.983(d)(3)		[G]§ 63.983(b)(2) [G]§ 63.983(b)(3) [G]§ 63.983(c)(1) § 63.983(c)(2) § 63.983(c)(3) § 63.983(d)(1) § 63.983(d)(1)(ii)		
OC4PHPV497	EP	R5121-01	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(B) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream specified in §115.121(a)(1) of this title with a concentration of VOC less than 612 parts per million by volume (ppmv) is exempt from §115.121(a)(1) of this title.	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None
OC4PHPV512	EP	R5121-01	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(B) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream specified in §115.121(a)(1) of this title with a concentration of VOC less than 612 parts per million by volume (ppmv) is exempt from §115.121(a)(1) of this title.	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None
OC4PHPV513	EP	R5121-01	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(B) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream specified in §115.121(a)(1) of this title with a concentration of VOC less than 612 parts per million by volume (ppmv) is exempt from §115.121(a)(1) of	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						this title.			
OC4PHPV516	EP	R5121-01	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(B) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream specified in §115.121(a)(1) of this title with a concentration of VOC less than 612 parts per million by volume (ppmv) is exempt from §115.121(a)(1) of this title.	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None
OC4PHPV5621	EP	R5121-01	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(B) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream specified in §115.121(a)(1) of this title with a concentration of VOC less than 612 parts per million by volume (ppmv) is exempt from §115.121(a)(1) of this title.	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None
OC4PHPV5641	EP	R5121-01	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(B) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream specified in §115.121(a)(1) of this title with a concentration of VOC less than 612 parts per million by volume (ppmv) is exempt from §115.121(a)(1) of this title.	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None
OC4PHPV662	EP	R5121-01	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(B) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream specified in §115.121(a)(1) of this title with a	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None



### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						concentration of VOC less than 612 parts per million by volume (ppmv) is exempt from §115.121(a)(1) of this title.			
OC4PHPV663	EP	R5121-01	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(B) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream specified in §115.121(a)(1) of this title with a concentration of VOC less than 612 parts per million by volume (ppmv) is exempt from §115.121(a)(1) of this title.	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None
OC4PHPV677	EP	R5121-01	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(B) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream specified in §115.121(a)(1) of this title with a concentration of VOC less than 612 parts per million by volume (ppmv) is exempt from §115.121(a)(1) of this title.	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None
OC4PHPV820	EP	R5720-01	HIGHLY REACTIVE VOC	30 TAC Chapter 115, HRVOC Vent Gas	§ 115.727(c)(2)	A vent gas stream that has the potential to emit HRVOCs, but has a concentration less than 100 ppmv at all times or has a maximum potential flow rate equal to or less than 100 dry standard cubic feet	None	§ 115.726(e)(3)(A) § 115.726(j)(2)	None

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						per hour is exempt from this division with the exception of § 115.726(e)(3)(A) of this title. The maximum potential HRVOC emissions for the sum of all vent gas streams claimed under this exemption, must be less for the account specified in § 115.722(a) or (b) of this title than 0.5 tpy.			
OC4PHPV834	EP	R5121-01	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(B) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream specified in §115.121(a)(1) of this title with a concentration of VOC less than 612 parts per million by volume (ppmv) is exempt from §115.121(a)(1) of this title.	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None
OC4PHPV836	EP	R5121-01	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(B) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream specified in §115.121(a)(1) of this title with a concentration of VOC less than 612 parts per million by volume (ppmv) is exempt from §115.121(a)(1) of this title.	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None
OC4PHRX311	EP	63FFFF-01	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2455(a)-Table 1.1.a.ii	For each Group 1 continuous process	[G]§ 63.115(d)(2)(v) § 63.115(d)(3)(iii)	§ 63.2450(f)(2) § 63.2450(f)(2)(i)	§ 63.2450(f)(2)(ii) § 63.2450(q)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 63.11(b) § 63.2450(b) § 63.2455(a) § 63.2455(b) § 63.2455(b)(1) § 63.2535(h) § 63.982(b) § 63.983(a)(1) § 63.983(a)(2) § 63.983(d)(1) § 63.983(d)(1)(i) [G]§ 63.983(d)(2) § 63.983(d)(3) § 63.987(a) § 63.997(b)(2) § 63.997(b)(3) § 63.997(c)(3)	vent, the owner or operator must reduce emissions of total organic HAP by venting emissions through a closed vent system to a flare.	§ 63.983(b) [G]§ 63.983(b)(1) [G]§ 63.983(b)(2) [G]§ 63.983(b)(3) [G]§ 63.983(c)(1) § 63.983(c)(2) § 63.983(c)(3) § 63.983(d)(1) § 63.983(d)(1)(ii) § 63.987(c) § 63.997(b) § 63.997(c)(2) § 63.997(c)(3) § 63.997(c)(3)(i) § 63.997(c)(3)(ii)	§ 63.2450(f)(2)(ii) § 63.983(b) [G]§ 63.983(d)(2) § 63.987(c) § 63.998(a)(1)(ii) § 63.998(a)(1)(iii)(A) § 63.998(a)(1)(iii)(B) [G]§ 63.998(b)(1) [G]§ 63.998(b)(2) [G]§ 63.998(b)(3) [G]§ 63.998(b)(5) [G]§ 63.998(d)(1) § 63.998(d)(3)(i) § 63.998(d)(3)(ii) § 63.998(d)(5)	§ 63.997(b)(2) § 63.997(c)(3) § 63.998(a)(1)(iii)(A) [G]§ 63.998(b)(3) [G]§ 63.999(a)(1) § 63.999(b)(5) § 63.999(c)(1) § 63.999(c)(2)(i) § 63.999(c)(3) § 63.999(c)(6) [G]§ 63.999(c)(6)(i) § 63.999(c)(6)(iv) [G]§ 63.999(d)(1) [G]§ 63.999(d)(2)
OC4PHRX311	EP	63FFFF-02	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2455(a)-Table 1.1.a.i § 63.2450(b) § 63.2450(i)(1) § 63.2450(i)(2) § 63.2455(a) § 63.2455(b) § 63.2455(b)(1) § 63.2535(h) § 63.982(c) § 63.982(c)(2) § 63.983(a)(1) § 63.983(a)(2) § 63.983(d)(1) § 63.983(d)(1)(i) [G]§ 63.983(d)(2) § 63.983(d)(3) § 63.988(a)(1) § 63.988(a)(2) § 63.988(a)(3)	For each Group 1 continuous process vent, the owner or operator must reduce emissions to an outlet process concentration less than or equal to 20 ppmv as organic HAP or TOC by venting emissions through a closed-vent system to any combination of control devices (except flare).	[G]§ 63.115(d)(2)(v) § 63.115(d)(3)(iii) § 63.2450(g) § 63.2450(g)(1) § 63.2450(g)(2) [G]§ 63.2450(g)(3) § 63.2450(g)(4) § 63.2450(k)(6) § 63.983(b) [G]§ 63.983(b)(1) [G]§ 63.983(b)(2) [G]§ 63.983(b)(3) [G]§ 63.983(c)(1) § 63.983(c)(2) § 63.983(c)(3) § 63.983(d)(1) § 63.983(d)(1)(ii) § 63.988(b)(1) § 63.996(b)(1) § 63.996(b)(1)(i)	§ 63.2450(k)(6) § 63.2525(g) § 63.2525(h) § 63.983(b) [G]§ 63.983(d)(2) § 63.988(b)(1) § 63.996(c)(2)(ii) § 63.998(a)(2)(i) § 63.998(a)(2)(ii)(A) § 63.998(a)(2)(ii)(B)(5) [G]§ 63.998(b)(1) [G]§ 63.998(b)(2) [G]§ 63.998(b)(3) [G]§ 63.998(b)(5) [G]§ 63.998(c)(1) § 63.998(c)(2)(iii) § 63.998(c)(3)(iii) [G]§ 63.998(d)(1) § 63.998(d)(3)(i) § 63.998(d)(3)(ii)	§ 63.2450(q) § 63.988(b)(1) § 63.996(b)(2) § 63.996(c)(6) § 63.997(c)(3) § 63.998(a)(2)(ii)(A) [G]§ 63.998(b)(3) [G]§ 63.999(a)(1) [G]§ 63.999(a)(2) [G]§ 63.999(b)(3) § 63.999(b)(5) § 63.999(c)(1) § 63.999(c)(2)(i) § 63.999(c)(6) [G]§ 63.999(c)(6)(i) § 63.999(c)(6)(iv)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 63.996(c)(1) § 63.996(c)(2) § 63.996(c)(2)(i) § 63.996(c)(3) § 63.996(c)(4) § 63.996(c)(5) § 63.996(c)(6) [G]§ 63.997(c)(1) § 63.997(c)(3) [G]§ 63.997(d)		§ 63.996(b)(2) § 63.997(a) [G]§ 63.997(c)(1) § 63.997(c)(2) § 63.997(c)(3) § 63.997(c)(3)(iii) [G]§ 63.997(d) § 63.997(e) § 63.997(e)(1)(i) [G]§ 63.997(e)(1)(iv) [G]§ 63.997(e)(1)(v) § 63.997(e)(2) § 63.997(e)(2)(i) § 63.997(e)(2)(i)(B) § 63.997(e)(2)(ii) § 63.997(e)(2)(iii) § 63.997(e)(2)(iii)(A) [G]§ 63.997(e)(2)(iii)(B) [G]§ 63.997(e)(2)(iii)(C) [G]§ 63.997(e)(2)(iii)(D) [G]§ 63.997(e)(2)(iii)(E)	§ 63.998(d)(5)	
OC4PHRX321	EP	63FFFF-01	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2455(a)-Table 1.1.a.ii § 63.11(b) § 63.2450(b) § 63.2455(a) § 63.2455(b) § 63.2455(b)(1) § 63.2535(h) § 63.982(b) § 63.983(a)(1) § 63.983(a)(2) § 63.983(d)(1) § 63.983(d)(1)(i) [G]§ 63.983(d)(2) § 63.983(d)(3) § 63.987(a)	For each Group 1 continuous process vent, the owner or operator must reduce emissions of total organic HAP by venting emissions through a closed vent system to a flare.	[G]§ 63.115(d)(2)(v) § 63.115(d)(3)(iii) § 63.983(b) [G]§ 63.983(b)(1) [G]§ 63.983(b)(2) [G]§ 63.983(b)(3) [G]§ 63.983(c)(1) § 63.983(c)(2) § 63.983(c)(3) § 63.983(d)(1) § 63.983(d)(1)(ii) § 63.987(c) § 63.997(b) § 63.997(c)(2) § 63.997(c)(3) § 63.997(c)(3)(i)	§ 63.2450(f)(2) § 63.2450(f)(2)(i) § 63.2450(f)(2)(ii) § 63.983(b) [G]§ 63.983(d)(2) § 63.987(c) § 63.998(a)(1)(ii) § 63.998(a)(1)(iii)(A) § 63.998(a)(1)(iii)(B) [G]§ 63.998(b)(1) [G]§ 63.998(b)(2) [G]§ 63.998(b)(3) [G]§ 63.998(b)(5) [G]§ 63.998(d)(1) § 63.998(d)(3)(i) § 63.998(d)(3)(ii)	§ 63.2450(f)(2)(ii) § 63.2450(q) § 63.997(b)(2) § 63.997(c)(3) § 63.998(a)(1)(iii)(A) [G]§ 63.998(b)(3) [G]§ 63.999(a)(1) § 63.999(b)(5) § 63.999(c)(1) § 63.999(c)(2)(i) § 63.999(c)(3) § 63.999(c)(6) [G]§ 63.999(c)(6)(i) § 63.999(c)(6)(iv) [G]§ 63.999(d)(1) [G]§ 63.999(d)(2)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 63.997(b)(2) § 63.997(b)(3) § 63.997(c)(3)		§ 63.997(c)(3)(ii)	§ 63.998(d)(5)	
OC4PHRX321	EP	63FFFF-02	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2455(a)-Table 1.1.a.i § 63.2450(b) § 63.2450(i)(1) § 63.2450(i)(2) § 63.2455(a) § 63.2455(b) § 63.2455(b)(1) § 63.2535(h) § 63.982(c) § 63.982(c)(2) § 63.983(a)(1) § 63.983(a)(2) § 63.983(d)(1) § 63.983(d)(1)(i) [G]§ 63.983(d)(2) § 63.983(d)(3) § 63.988(a)(1) § 63.988(a)(2) § 63.988(a)(3) § 63.996(c)(1) § 63.996(c)(2) § 63.996(c)(2)(i) § 63.996(c)(3) § 63.996(c)(4) § 63.996(c)(5) § 63.996(c)(6) [G]§ 63.997(c)(1) § 63.997(c)(3) [G]§ 63.997(d)	For each Group 1 continuous process vent, the owner or operator must reduce emissions to an outlet process concentration less than or equal to 20 ppmv as organic HAP or TOC by venting emissions through a closed-vent system to any combination of control devices (except flare).	[G]§ 63.115(d)(2)(v) § 63.115(d)(3)(iii) § 63.2450(g) § 63.2450(g)(1) § 63.2450(g)(2) [G]§ 63.2450(g)(3) § 63.2450(g)(4) § 63.2450(k)(6) § 63.983(b) [G]§ 63.983(b)(1) [G]§ 63.983(b)(2) [G]§ 63.983(b)(3) [G]§ 63.983(c)(1) § 63.983(c)(2) § 63.983(c)(3) § 63.983(d)(1) § 63.983(d)(1)(ii) § 63.988(b)(1) § 63.996(b)(1) § 63.996(b)(2) § 63.997(a) [G]§ 63.997(c)(1) § 63.997(c)(2) § 63.997(c)(3) § 63.997(c)(3)(iii) [G]§ 63.997(d) § 63.997(e) § 63.997(e)(1)(i) [G]§ 63.997(e)(1)(iv) [G]§ 63.997(e)(1)(v) § 63.997(e)(2) § 63.997(e)(2)(i) § 63.997(e)(2)(i)(B)	§ 63.2450(k)(6) § 63.2525(g) § 63.2525(h) § 63.983(b) [G]§ 63.983(d)(2) § 63.988(b)(1) § 63.996(c)(2)(ii) § 63.998(a)(2)(i) § 63.998(a)(2)(ii)(A) § 63.998(a)(2)(ii)(B)(5) [G]§ 63.998(b)(1) [G]§ 63.998(b)(2) [G]§ 63.998(b)(3) [G]§ 63.998(b)(5) [G]§ 63.998(c)(1) § 63.998(c)(2)(iii) § 63.998(c)(3)(iii) [G]§ 63.998(d)(1) § 63.998(d)(3)(i) § 63.998(d)(3)(ii) § 63.998(d)(5)	§ 63.2450(q) § 63.988(b)(1) § 63.996(b)(2) § 63.996(c)(6) § 63.997(c)(3) § 63.998(a)(2)(ii)(A) [G]§ 63.998(b)(3) [G]§ 63.999(a)(1) [G]§ 63.999(a)(2) [G]§ 63.999(b)(3) § 63.999(b)(5) § 63.999(c)(1) § 63.999(c)(2)(i) § 63.999(c)(6) [G]§ 63.999(c)(6)(i) § 63.999(c)(6)(iv)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
							§ 63.997(e)(2)(ii) § 63.997(e)(2)(iii) § 63.997(e)(2)(iii)(A) [G]§ 63.997(e)(2)(iii)(B) [G]§ 63.997(e)(2)(iii)(C) [G]§ 63.997(e)(2)(iii)(D) [G]§ 63.997(e)(2)(iii)(E)		
OC4PHRX331	EP	63FFFF-01	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2455(a)-Table 1.1.a.ii § 63.11(b) § 63.2450(b) § 63.2455(a) § 63.2455(b) § 63.2455(b)(1) § 63.2535(h) § 63.982(b) § 63.983(a)(1) § 63.983(a)(2) § 63.983(d)(1) § 63.983(d)(1)(i) [G]§ 63.983(d)(2) § 63.983(d)(3) § 63.987(a) § 63.997(b)(2) § 63.997(b)(3) § 63.997(c)(3)	For each Group 1 continuous process vent, the owner or operator must reduce emissions of total organic HAP by venting emissions through a closed vent system to a flare.	[G]§ 63.115(d)(2)(v) § 63.115(d)(3)(iii) § 63.983(b) [G]§ 63.983(b)(1) [G]§ 63.983(b)(2) [G]§ 63.983(b)(3) [G]§ 63.983(c)(1) § 63.983(c)(2) § 63.983(c)(3) § 63.983(d)(1) § 63.983(d)(1)(ii) § 63.987(c) § 63.997(b) § 63.997(c)(2) § 63.997(c)(3) § 63.997(c)(3)(i) § 63.997(c)(3)(ii)	§ 63.2450(f)(2) § 63.2450(f)(2)(i) § 63.2450(f)(2)(ii) § 63.983(b) [G]§ 63.983(d)(2) § 63.987(c) § 63.998(a)(1)(ii) § 63.998(a)(1)(iii)(A) § 63.998(a)(1)(iii)(B) [G]§ 63.998(b)(1) [G]§ 63.998(b)(2) [G]§ 63.998(b)(3) [G]§ 63.998(b)(5) [G]§ 63.998(d)(1) § 63.998(d)(3)(i) § 63.998(d)(3)(ii) § 63.998(d)(5)	§ 63.2450(f)(2)(ii) § 63.2450(q) § 63.997(b)(2) § 63.997(c)(3) § 63.998(a)(1)(iii)(A) [G]§ 63.998(b)(3) [G]§ 63.999(a)(1) § 63.999(b)(5) § 63.999(c)(1) § 63.999(c)(2)(i) § 63.999(c)(3) § 63.999(c)(6) [G]§ 63.999(c)(6)(i) § 63.999(c)(6)(iv) [G]§ 63.999(d)(1) [G]§ 63.999(d)(2)
OC4PHRX331	EP	63FFFF-02	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2455(a)-Table 1.1.a.i § 63.2450(b) § 63.2450(i)(1) § 63.2450(i)(2) § 63.2455(a) § 63.2455(b) § 63.2455(b)(1) § 63.2535(h) § 63.982(c)	For each Group 1 continuous process vent, the owner or operator must reduce emissions to an outlet process concentration less than or equal to 20 ppmv as organic HAP or TOC by venting emissions	[G]§ 63.115(d)(2)(v) § 63.115(d)(3)(iii) § 63.2450(g) § 63.2450(g)(1) § 63.2450(g)(2) [G]§ 63.2450(g)(3) § 63.2450(g)(4) § 63.2450(k)(6) § 63.983(b) [G]§ 63.983(b)(1)	§ 63.2450(k)(6) § 63.2525(g) § 63.2525(h) § 63.983(b) [G]§ 63.983(d)(2) § 63.988(b)(1) § 63.996(c)(2)(ii) § 63.998(a)(2)(i) § 63.998(a)(2)(ii)(A) § 63.998(a)(2)(ii)(B)(5)	§ 63.2450(q) § 63.988(b)(1) § 63.996(b)(2) § 63.996(c)(6) § 63.997(c)(3) § 63.998(a)(2)(ii)(A) [G]§ 63.998(b)(3) [G]§ 63.999(a)(1) [G]§ 63.999(a)(2) [G]§ 63.999(b)(3)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 63.982(c)(2) § 63.983(a)(1) § 63.983(a)(2) § 63.983(d)(1) § 63.983(d)(1)(i) [G]§ 63.983(d)(2) § 63.983(d)(3) § 63.988(a)(1) § 63.988(a)(2) § 63.988(a)(3) § 63.996(c)(1) § 63.996(c)(2) § 63.996(c)(2)(i) § 63.996(c)(3) § 63.996(c)(4) § 63.996(c)(5) § 63.996(c)(6) [G]§ 63.997(c)(1) § 63.997(c)(3) [G]§ 63.997(d)	through a closed-vent system to any combination of control devices (except flare).	[G]§ 63.983(b)(2) [G]§ 63.983(b)(3) [G]§ 63.983(c)(1) § 63.983(c)(2) § 63.983(c)(3) § 63.983(d)(1) § 63.983(d)(1)(ii) § 63.988(b)(1) § 63.996(b)(1) § 63.996(b)(1)(i) § 63.996(b)(2) § 63.997(a) [G]§ 63.997(c)(1) § 63.997(c)(2) § 63.997(c)(3) § 63.997(c)(3)(iii) [G]§ 63.997(d) § 63.997(e) § 63.997(e)(1)(i) [G]§ 63.997(e)(1)(iv) [G]§ 63.997(e)(1)(v) § 63.997(e)(2) § 63.997(e)(2)(i) § 63.997(e)(2)(i)(B) § 63.997(e)(2)(ii) § 63.997(e)(2)(iii) § 63.997(e)(2)(iii)(A) [G]§ 63.997(e)(2)(iii)(B) [G]§ 63.997(e)(2)(iii)(C) [G]§ 63.997(e)(2)(iii)(D) [G]§ 63.997(e)(2)(iii)(E)	[G]§ 63.998(b)(1) [G]§ 63.998(b)(2) [G]§ 63.998(b)(3) [G]§ 63.998(b)(5) [G]§ 63.998(c)(1) § 63.998(c)(2)(iii) § 63.998(c)(3)(iii) [G]§ 63.998(d)(1) § 63.998(d)(3)(i) § 63.998(d)(3)(ii) § 63.998(d)(5)	§ 63.999(b)(5) § 63.999(c)(1) § 63.999(c)(2)(i) § 63.999(c)(6) [G]§ 63.999(c)(6)(i) § 63.999(c)(6)(iv)
OC4PHRX341	EP	63FFFF-01	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2455(a)-Table 1.1.a.ii § 63.11(b) § 63.2450(b) § 63.2455(a) § 63.2455(b)	For each Group 1 continuous process vent, the owner or operator must reduce emissions of total organic HAP by	[G]§ 63.115(d)(2)(v) § 63.115(d)(3)(iii) § 63.983(b) [G]§ 63.983(b)(1) [G]§ 63.983(b)(2) [G]§ 63.983(b)(3)	§ 63.2450(f)(2) § 63.2450(f)(2)(i) § 63.2450(f)(2)(ii) § 63.983(b) [G]§ 63.983(d)(2) § 63.987(c)	§ 63.2450(f)(2)(ii) § 63.2450(q) § 63.997(b)(2) § 63.997(c)(3) § 63.998(a)(1)(iii)(A) [G]§ 63.998(b)(3)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 63.2455(b)(1) § 63.2535(h) § 63.982(b) § 63.983(a)(1) § 63.983(a)(2) § 63.983(d)(1) § 63.983(d)(1)(i) [G]§ 63.983(d)(2) § 63.983(d)(3) § 63.987(a) § 63.997(b)(2) § 63.997(b)(3) § 63.997(c)(3)	venting emissions through a closed vent system to a flare.	[G]§ 63.983(c)(1) § 63.983(c)(2) § 63.983(c)(3) § 63.983(d)(1) § 63.983(d)(1)(ii) § 63.987(c) § 63.997(b) § 63.997(c)(2) § 63.997(c)(3) § 63.997(c)(3)(i) § 63.997(c)(3)(ii)	§ 63.998(a)(1)(ii) § 63.998(a)(1)(iii)(A) § 63.998(a)(1)(iii)(B) [G]§ 63.998(b)(1) [G]§ 63.998(b)(2) [G]§ 63.998(b)(3) [G]§ 63.998(b)(5) [G]§ 63.998(d)(1) § 63.998(d)(3)(i) § 63.998(d)(3)(ii) § 63.998(d)(5)	[G]§ 63.999(a)(1) § 63.999(b)(5) § 63.999(c)(1) § 63.999(c)(2)(i) § 63.999(c)(3) § 63.999(c)(6) [G]§ 63.999(c)(6)(i) § 63.999(c)(6)(iv) [G]§ 63.999(d)(1) [G]§ 63.999(d)(2)
OC4PHRX341	EP	63FFFF-02	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2455(a)-Table 1.1.a.i § 63.2450(b) § 63.2450(i)(1) § 63.2450(i)(2) § 63.2455(a) § 63.2455(b) § 63.2455(b)(1) § 63.2535(h) § 63.982(c) § 63.982(c)(2) § 63.983(a)(1) § 63.983(a)(2) § 63.983(d)(1) § 63.983(d)(1)(i) [G]§ 63.983(d)(2) § 63.983(d)(3) § 63.988(a)(1) § 63.988(a)(2) § 63.988(a)(3) § 63.996(c)(1) § 63.996(c)(2) § 63.996(c)(2)(i) § 63.996(c)(3)	For each Group 1 continuous process vent, the owner or operator must reduce emissions to an outlet process concentration less than or equal to 20 ppmv as organic HAP or TOC by venting emissions through a closed-vent system to any combination of control devices (except flare).	[G]§ 63.115(d)(2)(v) § 63.115(d)(3)(iii) § 63.2450(g) § 63.2450(g)(1) § 63.2450(g)(2) [G]§ 63.2450(g)(3) § 63.2450(g)(4) § 63.2450(k)(6) § 63.983(b) [G]§ 63.983(b)(1) [G]§ 63.983(b)(2) [G]§ 63.983(b)(3) [G]§ 63.983(c)(1) § 63.983(c)(2) § 63.983(c)(3) § 63.983(d)(1) § 63.983(d)(1)(ii) § 63.988(b)(1) § 63.996(b)(1) § 63.996(b)(1)(i) § 63.996(b)(2) § 63.997(a) [G]§ 63.997(c)(1) § 63.997(c)(2)	§ 63.2450(k)(6) § 63.2525(g) § 63.2525(h) § 63.983(b) [G]§ 63.983(d)(2) § 63.988(b)(1) § 63.996(c)(2)(ii) § 63.998(a)(2)(i) § 63.998(a)(2)(ii)(A) § 63.998(a)(2)(ii)(B)(5) [G]§ 63.998(b)(1) [G]§ 63.998(b)(2) [G]§ 63.998(b)(3) [G]§ 63.998(b)(5) [G]§ 63.998(c)(1) § 63.998(c)(2)(iii) § 63.998(c)(3)(iii) [G]§ 63.998(d)(1) § 63.998(d)(3)(i) § 63.998(d)(3)(ii) § 63.998(d)(5)	§ 63.2450(q) § 63.988(b)(1) § 63.996(b)(2) § 63.996(c)(6) § 63.997(c)(3) § 63.998(a)(2)(ii)(A) [G]§ 63.998(b)(3) [G]§ 63.999(a)(1) [G]§ 63.999(a)(2) [G]§ 63.999(b)(3) § 63.999(b)(5) § 63.999(c)(1) § 63.999(c)(2)(i) § 63.999(c)(6) [G]§ 63.999(c)(6)(i) § 63.999(c)(6)(iv)



### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 63.996(c)(4) § 63.996(c)(5) § 63.996(c)(6) [G]§ 63.997(c)(1) § 63.997(c)(3) [G]§ 63.997(d)		§ 63.997(c)(3) § 63.997(c)(3)(iii) [G]§ 63.997(d) § 63.997(e) § 63.997(e)(1)(i) [G]§ 63.997(e)(1)(iv) [G]§ 63.997(e)(1)(v) § 63.997(e)(2) § 63.997(e)(2)(i) § 63.997(e)(2)(i)(B) § 63.997(e)(2)(ii) § 63.997(e)(2)(iii) § 63.997(e)(2)(iii)(A) [G]§ 63.997(e)(2)(iii)(B) [G]§ 63.997(e)(2)(iii)(C) [G]§ 63.997(e)(2)(iii)(D) [G]§ 63.997(e)(2)(iii)(E)		
OC4PHSC1	EU	R5412-01	VOC	30 TAC Chapter 115, Degreasing Processes	§ 115.412(1) § 115.411(1) § 115.411(2) [G]§ 115.412(1)(A) § 115.412(1)(C) [G]§ 115.412(1)(F)	Cold solvent cleaning. No person shall own or operate a system utilizing a VOC for the cold solvent cleaning of objects without the controls listed in §115.412(1)(A)-(F).	[G]§ 115.415(1) § 115.415(3) ** See Periodic Monitoring Summary	None	None
OC4PHSC2	EU	R5412-01	VOC	30 TAC Chapter 115, Degreasing Processes	§ 115.412(1) § 115.411(1) § 115.411(2) [G]§ 115.412(1)(A) § 115.412(1)(C) [G]§ 115.412(1)(F)	Cold solvent cleaning. No person shall own or operate a system utilizing a VOC for the cold solvent cleaning of objects without the controls listed in §115.412(1)(A)-(F).	[G]§ 115.415(1) § 115.415(3) ** See Periodic Monitoring Summary	None	None
OC4PHSP133	EU	R5131-01	VOC	30 TAC Chapter 115, Water	§ 115.137(a)(2) [G]§ 115.132(a)(4)	Any single or multiple compartment VOC water separator which	[G]§ 115.135(a) § 115.136(a)(1) § 115.136(a)(3)	§ 115.136(a)(1) § 115.136(a)(3) § 115.136(a)(4)	None

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
				Separation		separates materials having a true vapor pressure of VOC < .5 psia obtained from any equipment is exempt from §115.132(a).	§ 115.136(a)(4)		
OC4PHSP548	EU	R5131-01	VOC	30 TAC Chapter 115, Water Separation	§ 115.137(a)(2) [G]§ 115.132(a)(4)	Any single or multiple compartment VOC water separator which separates materials having a true vapor pressure of VOC < .5 psia obtained from any equipment is exempt from §115.132(a).	[G]§ 115.135(a) § 115.136(a)(1) § 115.136(a)(3) § 115.136(a)(4)	§ 115.136(a)(1) § 115.136(a)(3) § 115.136(a)(4)	None
OC4PHST122	EU	R5112-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
OC4PHST138	EU	R5112-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
OC4PHST510	EU	R5112-01	VOC	30 TAC Chapter 115,	§ 115.111(a)(1)	Except as provided in § 115.118, a storage	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5)	None

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
				Storage of VOCs		tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.		§ 115.118(a)(7)	
OC4PHST660	EU	R5112-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
OC4PHST760	EU	R5112-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(6)(A) § 115.118(a)(7)	None
OC4PHST761	EU	R5112-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(6)(A) § 115.118(a)(7)	None
OC4PHUL10	EU	R5211-01	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(a)(1) § 115.212(a)(2) § 115.214(a)(1)(B) § 115.214(a)(1)(D) § 115.214(a)(1)(D)(i)	Vapor pressure (at land-based operations). All land-based loading and unloading of VOC	§ 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.215 § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						with a true vapor pressure less than 0.5 psia is exempt from the requirements of this division, except as specified.			
OC4PHUL11	EU	R5211-01	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.212(a)(3) § 115.212(a)(2) § 115.212(a)(3)(A) § 115.212(a)(3)(A)(ii) § 115.212(a)(3)(B) [G]§ 115.212(a)(3)(C) § 115.212(a)(3)(D) § 115.214(a)(1)(B) § 115.214(a)(1)(C)	All land-based VOC transfer to or from transport vessels shall be conducted in the manner specified for leak-free operations.	§ 115.212(a)(3)(B) § 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.214(a)(1)(A)(ii) § 115.214(a)(1)(A)(iii)	§ 115.216 § 115.216(3)(A) § 115.216(3)(A)(i) § 115.216(3)(A)(iii)	None
OC4PHUL12	EU	R5211-01	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.212(a)(3) § 115.212(a)(2) § 115.212(a)(3)(A) § 115.212(a)(3)(A)(i) § 115.212(a)(3)(B) [G]§ 115.212(a)(3)(C) § 115.212(a)(3)(D) § 115.214(a)(1)(B) § 115.214(a)(1)(C)	All land-based VOC transfer to or from transport vessels shall be conducted in the manner specified for leak-free operations.	§ 115.212(a)(3)(B) § 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.214(a)(1)(A)(ii) § 115.214(a)(1)(A)(iii)	§ 115.216 § 115.216(3)(A) § 115.216(3)(A)(i) § 115.216(3)(A)(iii)	None
OC4PHUL14	EU	R5211-01	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(a)(1) § 115.212(a)(2) § 115.214(a)(1)(B) § 115.214(a)(1)(D) § 115.214(a)(1)(D)(i)	Vapor pressure (at land-based operations). All land-based loading and unloading of VOC with a true vapor pressure less than 0.5 psia is exempt from the requirements of this division, except as specified.	§ 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.215 § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
OC4PHUL17	EU	R5211-01	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(a)(1) § 115.212(a)(2) § 115.214(a)(1)(B) § 115.214(a)(1)(D) § 115.214(a)(1)(D)(i)	Vapor pressure (at land-based operations). All land-based loading and unloading of VOC with a true vapor pressure less than 0.5 psia is exempt from the requirements of this division, except as specified.	§ 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.215 § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None
OC4PHUL6	EU	R5211-01	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(a)(1) § 115.212(a)(2) § 115.214(a)(1)(B) § 115.214(a)(1)(D) § 115.214(a)(1)(D)(i)	Vapor pressure (at land-based operations). All land-based loading and unloading of VOC with a true vapor pressure less than 0.5 psia is exempt from the requirements of this division, except as specified.	§ 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.215 § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None
OC4PHUL8	EU	R5211-01	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.212(a)(3) § 115.212(a)(2) § 115.212(a)(3)(A) § 115.212(a)(3)(A)(ii) § 115.212(a)(3)(B) [G]§ 115.212(a)(3)(C) § 115.212(a)(3)(D) § 115.214(a)(1)(B) § 115.214(a)(1)(C)	All land-based VOC transfer to or from transport vessels shall be conducted in the manner specified for leak-free operations.	§ 115.212(a)(3)(B) § 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.214(a)(1)(A)(ii) § 115.214(a)(1)(A)(iii)	§ 115.216 § 115.216(3)(A) § 115.216(3)(A)(i) § 115.216(3)(A)(iii)	None
OC4PHUL9	EU	R5211-01	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.212(a)(3) § 115.212(a)(2) § 115.212(a)(3)(A) § 115.212(a)(3)(A)(ii) § 115.212(a)(3)(B)	All land-based VOC transfer to or from transport vessels shall be conducted in the manner specified for	§ 115.212(a)(3)(B) § 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.214(a)(1)(A)(ii) § 115.214(a)(1)(A)(iii)	§ 115.216 § 115.216(3)(A) § 115.216(3)(A)(i) § 115.216(3)(A)(iii)	None

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					[G]§ 115.212(a)(3)(C) § 115.212(a)(3)(D) § 115.214(a)(1)(B) § 115.214(a)(1)(C)	leak-free operations.			
PROPDH1	PRO	R5460-01	VOC	30 TAC Chapter 115, Subchapter E, Division 6	§ 115.463(a)(1) [G]§ 115.463(c)	The owner or operator shall limit the volatile organic compounds (VOC) content of cleaning solutions to 0.42 pound of VOC per gallon of solution (lb VOC/gal solution), as applied.	[G]§ 115.465(1)	§ 115.468(b)(1) § 115.468(b)(5)	None
PROPDH1	PRO	R5460-02	VOC	30 TAC Chapter 115, Subchapter E, Division 6	§ 115.463(a)(2) [G]§ 115.463(c)	The owner or operator shall limit the composite partial vapor pressure of the cleaning solution to 8.0 millimeters of mercury at 20 degrees Celsius (68 degrees Fahrenheit).	[G]§ 115.465(1)	§ 115.468(b)(1) § 115.468(b)(5)	None
PROPDH1	PRO	61FF-01	BENZENE	40 CFR Part 61, Subpart FF	§ 61.348(a)(1) § 61.348(a)(1)(iii) § 61.348(a)(4) [G]§ 61.348(d)	The owner or operator shall design, install, operate and maintain a treatment process that removes or destroys benzene as specified.	None	§ 61.356(e) § 61.356(e)(1) [G]§ 61.356(i)	None
PROPDH1	PRO	63FFFF-01	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2440(a) § 63.2450(a) § 63.2450(l) § 63.2465(a) § 63.2465(a)-Table 3.1.a	This subpart applies to each miscellaneous organic chemical manufacturing affected source.	§ 63.2445(d) § 63.2445(e) § 63.2445(f) § 63.2450(g) § 63.2450(g)(1) § 63.2450(g)(2)	§ 63.2445(f) § 63.2525 § 63.2525(a) [G]§ 63.2525(b) § 63.2525(c) § 63.2525(f)	§ 63.2435(d) § 63.2445(c) § 63.2450(g)(5) § 63.2450(m) § 63.2450(m)(1) § 63.2450(m)(2)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 63.2465(b) § 63.2465(c) § 63.2465(c)(2) § 63.2465(c)(3)		[G]§ 63.2450(g)(3) § 63.2450(g)(4) § 63.2465(c)(1)	§ 63.2525(j)	§ 63.2450(q) § 63.2515(a) § 63.2515(b)(1) § 63.2515(c) § 63.2520(a) [G]§ 63.2520(b) [G]§ 63.2520(c) [G]§ 63.2520(d) § 63.2520(e) § 63.2520(e)(1) [G]§ 63.2520(e)(10) § 63.2520(e)(2) § 63.2520(e)(3) § 63.2520(e)(4) § 63.2520(e)(5) § 63.2520(e)(5)(i) [G]§ 63.2520(e)(5)(ii) [G]§ 63.2520(e)(5)(iii) § 63.2520(e)(6) § 63.2520(e)(7) § 63.2520(e)(9)
PROPDH1	PRO	63FFFF-01	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2460(a) § 63.11(b) § 63.2450(b) § 63.2460(a)-Table 2.1.c § 63.2460(b) § 63.2460(c)(7) § 63.982(b) § 63.983(a)(1) § 63.983(a)(2) § 63.983(d)(1) § 63.983(d)(1)(i) [G]§ 63.983(d)(2) § 63.983(d)(3) § 63.987(a) § 63.997(b)(2)	You must meet each emission limit in Table 2 to this subpart that applies to you, and you must meet each applicable requirement specified in §63.2460(b) and (c).	[G]§ 63.115(d)(2)(v) § 63.115(d)(3)(iii) § 63.2460(c)(2)(i) § 63.2460(c)(2)(ii) § 63.2460(c)(2)(vi) § 63.2460(c)(3) § 63.2460(c)(3)(i) § 63.2460(c)(4) § 63.2460(c)(6) § 63.983(b) [G]§ 63.983(b)(1) [G]§ 63.983(b)(2) [G]§ 63.983(b)(3) [G]§ 63.983(c)(1) § 63.983(c)(2) § 63.983(c)(3)	§ 63.2450(f)(2) § 63.2450(f)(2)(i) § 63.2450(f)(2)(ii) § 63.2460(c)(3)(ii) § 63.2460(c)(6) § 63.2525(g) § 63.983(b) [G]§ 63.983(d)(2) § 63.987(c) § 63.998(a)(1)(ii) § 63.998(a)(1)(iii)(A) § 63.998(a)(1)(iii)(B) [G]§ 63.998(b)(1) [G]§ 63.998(b)(2) [G]§ 63.998(b)(3) [G]§ 63.998(b)(5)	§ 63.2450(f)(2)(ii) § 63.2450(q) § 63.2460(c)(3)(i) § 63.997(b)(2) § 63.997(c)(3) § 63.998(a)(1)(iii)(A) [G]§ 63.998(b)(3) [G]§ 63.999(a)(1) § 63.999(b)(5) § 63.999(c)(1) § 63.999(c)(2)(i) § 63.999(c)(3) § 63.999(c)(6) [G]§ 63.999(c)(6)(i) § 63.999(c)(6)(iv) [G]§ 63.999(d)(1)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 63.997(b)(3) § 63.997(c)(3)		§ 63.983(d)(1) § 63.983(d)(1)(ii) § 63.987(c) § 63.997(b) § 63.997(c)(2) § 63.997(c)(3) § 63.997(c)(3)(i) § 63.997(c)(3)(ii)	[G]§ 63.998(c)(1) [G]§ 63.998(d)(1) § 63.998(d)(3)(i) § 63.998(d)(3)(ii) § 63.998(d)(5)	[G]§ 63.999(d)(2)
PROPDH1A	EP	63FFFF-01	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2460(a) § 63.11(b) § 63.2450(b) § 63.2460(a)-Table 2.1.c § 63.2460(b) § 63.2460(c)(7) § 63.982(b) § 63.983(a)(1) § 63.983(a)(2) § 63.983(d)(1) § 63.983(d)(1)(i) [G]§ 63.983(d)(2) § 63.983(d)(3) § 63.987(a) § 63.997(b)(2) § 63.997(b)(3) § 63.997(c)(3)	You must meet each emission limit in Table 2 to this subpart that applies to you, and you must meet each applicable requirement specified in §63.2460(b) and (c).	[G]§ 63.115(d)(2)(v) § 63.115(d)(3)(iii) § 63.2460(c)(2)(i) § 63.2460(c)(2)(ii) § 63.2460(c)(2)(vi) § 63.2460(c)(3) § 63.2460(c)(3)(i) § 63.2460(c)(4) § 63.2460(c)(6) § 63.983(b) [G]§ 63.983(b)(1) [G]§ 63.983(b)(2) [G]§ 63.983(b)(3) [G]§ 63.983(c)(1) § 63.983(c)(2) § 63.983(c)(3) § 63.983(d)(1) § 63.983(d)(1)(ii) § 63.987(c) § 63.997(b) § 63.997(c)(2) § 63.997(c)(3) § 63.997(c)(3)(i) § 63.997(c)(3)(ii)	§ 63.2450(f)(2) § 63.2450(f)(2)(i) § 63.2450(f)(2)(ii) § 63.2460(c)(3)(ii) § 63.2460(c)(6) § 63.2525(g) § 63.983(b) [G]§ 63.983(d)(2) § 63.987(c) § 63.998(a)(1)(ii) § 63.998(a)(1)(iii)(A) § 63.998(a)(1)(iii)(B) [G]§ 63.998(b)(1) [G]§ 63.998(b)(2) [G]§ 63.998(b)(3) [G]§ 63.998(b)(5) [G]§ 63.998(c)(1) § 63.998(d)(3)(i) § 63.998(d)(3)(ii) § 63.998(d)(5)	§ 63.2450(f)(2)(ii) § 63.2450(q) § 63.2460(c)(3)(i) § 63.997(b)(2) § 63.997(c)(3) § 63.998(a)(1)(iii)(A) [G]§ 63.998(b)(3) [G]§ 63.999(a)(1) § 63.999(b)(5) § 63.999(c)(1) § 63.999(c)(2)(i) § 63.999(c)(3) § 63.999(c)(6) [G]§ 63.999(c)(6)(i) § 63.999(c)(6)(iv) [G]§ 63.999(d)(1) [G]§ 63.999(d)(2)



**Additional Monitoring Requirements**

**Periodic Monitoring Summary ..... 120**

### Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: OC4PHDL460	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-01
Pollutant: PM (OPACITY)	Main Standard: § 111.111(a)(1)(B)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per calendar quarter	
Averaging Period: n/a	
<p>Deviation Limit: There shall be no visible emissions. If visible emissions are observed, the permit holder shall either report a deviation or perform Test Method 9 and opacity shall not exceed 20%.</p> <p>Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor.</p> <p>If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions. If the result of the Test Method 9 is opacity above the opacity limit in the applicable requirement, the permit holder shall report a deviation.</p>	

### Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: OC4PHGE001	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-01
Pollutant: PM (OPACITY)	Main Standard: § 111.111(a)(1)(B)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per calendar quarter	
Averaging Period: n/a	
<p>Deviation Limit: There shall be no visible emissions. If visible emissions are observed, the permit holder shall either report a deviation or perform Test Method 9 and opacity shall not exceed 20%.</p> <p>Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor.</p> <p>If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions. If the result of the Test Method 9 is opacity above the opacity limit in the applicable requirement, the permit holder shall report a deviation.</p>	

### Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: OC4PHGE860	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-01
Pollutant: PM (OPACITY)	Main Standard: § 111.111(a)(1)(B)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per calendar quarter	
Averaging Period: n/a	
<p>Deviation Limit: There shall be no visible emissions. If visible emissions are observed, the permit holder shall either report a deviation or perform Test Method 9 and opacity shall not exceed 20%.</p> <p>Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor.</p> <p>If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions. If the result of the Test Method 9 is opacity above the opacity limit in the applicable requirement, the permit holder shall report a deviation.</p>	

### Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: OC4PHH310	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-01
Pollutant: PM (OPACITY)	Main Standard: § 111.111(a)(1)(B)
Monitoring Information	
Indicator: Fuel Type	
Minimum Frequency: Annually	
Averaging Period: n/a	
Deviation Limit: If an alternate fuel is fired, either alone or in combination with the specified gas, it shall be considered and reported as a deviation.	
Periodic Monitoring Text: Record the type of fuel used by the unit. If an alternate fuel is fired, either alone or in combination with the specified gas, it shall be considered and reported as a deviation.	

### Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: OC4PHH310	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-01
Pollutant: VOC	Main Standard: § 115.122(a)(2)
Monitoring Information	
Indicator: Period of Operation	
Minimum Frequency: n/a	
Averaging Period: n/a	
Deviation Limit: Monitor and record the periods of operation of the steam generating units or process heater. All periods that are not recorded shall be considered and reported as a deviation. The records must be readily available for inspection.	
Periodic Monitoring Text: Monitor and record the periods of operation of the steam generating units or process heater. All periods that are not recorded shall be considered and reported as a deviation. The records must be readily available for inspection.	

### Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: OC4PHH320	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-01
Pollutant: PM (OPACITY)	Main Standard: § 111.111(a)(1)(B)
Monitoring Information	
Indicator: Fuel Type	
Minimum Frequency: Annually	
Averaging Period: n/a	
Deviation Limit: If an alternate fuel is fired, either alone or in combination with the specified gas, it shall be considered and reported as a deviation.	
Periodic Monitoring Text: Record the type of fuel used by the unit. If an alternate fuel is fired, either alone or in combination with the specified gas, it shall be considered and reported as a deviation.	

### Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: OC4PHH320	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-01
Pollutant: VOC	Main Standard: § 115.122(a)(2)
Monitoring Information	
Indicator: Period of Operation	
Minimum Frequency: n/a	
Averaging Period: n/a	
Deviation Limit: Monitor and record the periods of operation of the steam generating units or process heater. All periods that are not recorded shall be considered and reported as a deviation.	
Periodic Monitoring Text: Monitor and record the periods of operation of the steam generating units or process heater. All periods that are not recorded shall be considered and reported as a deviation. The records must be readily available for inspection.	



### Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: OC4PHH330	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-01
Pollutant: PM (OPACITY)	Main Standard: § 111.111(a)(1)(B)
Monitoring Information	
Indicator: Fuel Type	
Minimum Frequency: Annually	
Averaging Period: n/a	
Deviation Limit: If an alternate fuel is fired, either alone or in combination with the specified gas, it shall be considered and reported as a deviation.	
Periodic Monitoring Text: Record the type of fuel used by the unit. If an alternate fuel is fired, either alone or in combination with the specified gas, it shall be considered and reported as a deviation.	

### Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: OC4PHH330	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-01
Pollutant: VOC	Main Standard: § 115.122(a)(2)
Monitoring Information	
Indicator: Period of Operation	
Minimum Frequency: n/a	
Averaging Period: n/a	
Deviation Limit: Monitor and record the periods of operation of the steam generating units or process heater. All periods that are not recorded shall be considered and reported as a deviation.	
Periodic Monitoring Text: Monitor and record the periods of operation of the steam generating units or process heater. All periods that are not recorded shall be considered and reported as a deviation. The records must be readily available for inspection.	

### Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: OC4PHH340	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-01
Pollutant: PM (OPACITY)	Main Standard: § 111.111(a)(1)(B)
Monitoring Information	
Indicator: Fuel Type	
Minimum Frequency: Annually	
Averaging Period: n/a	
Deviation Limit: If an alternate fuel is fired, either alone or in combination with the specified gas, it shall be considered and reported as a deviation.	
Periodic Monitoring Text: Record the type of fuel used by the unit. If an alternate fuel is fired, either alone or in combination with the specified gas, it shall be considered and reported as a deviation.	

### Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: OC4PHH340	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-01
Pollutant: VOC	Main Standard: § 115.122(a)(2)
Monitoring Information	
Indicator: Period of Operation	
Minimum Frequency: n/a	
Averaging Period: n/a	
Deviation Limit: Monitor and record the periods of operation of the steam generating units or process heater. All periods that are not recorded shall be considered and reported as a deviation. The records must be readily available for inspection.	
Periodic Monitoring Text: Monitor and record the periods of operation of the steam generating units or process heater. All periods that are not recorded shall be considered and reported as a deviation. The records must be readily available for inspection.	

### Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: OC4PHO470	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-01
Pollutant: PM (OPACITY)	Main Standard: § 111.111(a)(1)(B)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per calendar quarter	
Averaging Period: n/a	
<p>Deviation Limit: There shall be no visible emissions. If visible emissions are observed, the permit holder shall either report a deviation or perform Test Method 9 and opacity shall not exceed 20%.</p> <p>Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor.</p> <p>If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions. If the result of the Test Method 9 is opacity above the opacity limit in the applicable requirement, the permit holder shall report a deviation.</p>	

### Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: OC4PHSC1	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Degreasing Processes	SOP Index No.: R5412-01
Pollutant: VOC	Main Standard: § 115.412(1)
Monitoring Information	
Indicator: Visual Inspection	
Minimum Frequency: Monthly	
Averaging Period: n/a	
Deviation Limit: Any monitoring data which indicates that the cold cleaner is not in compliance with the applicable requirements of 30 TAC § 115.412(1) (A)-(F) shall be considered and reported as a deviation.	
Periodic Monitoring Text: Inspect equipment and record data monthly to ensure compliance with any applicable requirements in § 115.412(1)(A)-(F). Any monitoring data which indicates that the cold cleaner is not in compliance with the applicable requirements of § 115.412(1)(A)-(F) shall be considered and reported as a deviation.	

### Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: OC4PHSC2	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Degreasing Processes	SOP Index No.: R5412-01
Pollutant: VOC	Main Standard: § 115.412(1)
Monitoring Information	
Indicator: Visual Inspection	
Minimum Frequency: Monthly	
Averaging Period: n/a	
Deviation Limit: Any monitoring data which indicates that the cold cleaner is not in compliance with the applicable requirements of 30 TAC § 115.412(1) (A)-(F) shall be considered and reported as a deviation.	
Periodic Monitoring Text: Inspect equipment and record data monthly to ensure compliance with any applicable requirements in § 115.412(1)(A)-(F). Any monitoring data which indicates that the cold cleaner is not in compliance with the applicable requirements of § 115.412(1)(A)-(F) shall be considered and reported as a deviation.	

**Permit Shield**

**Permit Shield ..... 135**



### Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
OC4PHGE001	N/A	40 CFR Part 60, Subpart JJJJ	Not a SI ICE that commenced construction or modified/reconstruction after 06/12/2006.
OC4PHH310	N/A	40 CFR Part 63, Subpart DDDDD	Process heater used as a control device that is part of the affected source subject to another subpart of Part 63 is not subject to Subpart DDDDD.
OC4PHH320	N/A	40 CFR Part 63, Subpart DDDDD	Process heater used as a control device that is part of the affected source subject to another subpart of Part 63 is not subject to Subpart DDDDD.
OC4PHH330	N/A	40 CFR Part 63, Subpart DDDDD	Process heater used as a control device that is part of the affected source subject to another subpart of Part 63 is not subject to Subpart DDDDD.
OC4PHH340	N/A	40 CFR Part 63, Subpart DDDDD	Process heater used as a control device that is part of the affected source subject to another subpart of Part 63 is not subject to Subpart DDDDD.
OC4PHLR16	N/A	30 TAC Chapter 115, Loading and Unloading of VOC	Transport vessel definition in 115.10 excludes vacuum trucks used exclusively for maintenance and spill response.
OC4PHRX132	N/A	40 CFR Part 60, Subpart III	Affected facility is an air oxidation reactor, but process does not produce any of the chemicals listed in 60.617.

### Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
OC4PHRX132	N/A	40 CFR Part 60, Subpart RRR	Affected facility is an air oxidation reactor, but process does not produce any of the chemicals listed in 60.707.
OC4PHRX193	N/A	40 CFR Part 60, Subpart III	Affected facility does not meet the definition of an oxidation reactor and does not produce any of the chemicals in 60.617.
OC4PHRX193	N/A	40 CFR Part 60, Subpart RRR	This is a reactor constructed after June 29, 1990 that is part of a process unit producing a listed chemical in 60.707. However, there is no vent stream because NSPS RRR excludes relief valves discharges and equipment leaks.
OC4PHRX311	N/A	40 CFR Part 60, Subpart III	Affected facility does not meet the definition of oxidation reactor and does not produce any of the chemicals listed in 60.617.
OC4PHRX321	N/A	40 CFR Part 60, Subpart III	Affected facility does not meet the definition of oxidation reactor and does not produce any of the chemicals listed in 60.617.
OC4PHRX331	N/A	40 CFR Part 60, Subpart III	Affected facility does not meet the definition of oxidation reactor and does not produce any of the chemicals listed in 60.617.

### Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
OC4PHRX341	N/A	40 CFR Part 60, Subpart III	Affected facility does not meet the definition of oxidation reactor and does not produce any of the chemicals listed in 60.617.
OC4PHSC1	N/A	40 CFR Part 63, Subpart T	The solvent cleaning machine uses less than 5% by weight of halogenated solvents.
OC4PHSC2	N/A	40 CFR Part 63, Subpart T	The solvent cleaning machine uses less than 5% by weight of halogenated solvents.
OC4PHST001	N/A	30 TAC Chapter 115, Storage of VOCs	A storage tank with storage capacity less than or equal to 1,000 gallons is exempt from the requirements of this division.
OC4PHST001	N/A	40 CFR Part 60, Subpart Kb	This subpart does not apply to storage vessels with a capacity of less than 19,800 gallons.
OC4PHST001	N/A	40 CFR Part 61, Subpart Y	The storage vessel does not store benzene and is not applicable to this subpart.
OC4PHST122	N/A	40 CFR Part 60, Subpart Kb	The storage vessel has a storage capacity of less than 39,900 gallons and a vapor pressure less than 2.2 psia.
OC4PHST122	N/A	40 CFR Part 61, Subpart Y	This storage vessel does not store benzene and is not applicable to this subpart.

### Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
OC4PHST138	N/A	40 CFR Part 60, Subpart Kb	The storage vessel has a storage capacity of less than 39,900 gallons and a vapor pressure less than 2.2 psia
OC4PHST138	N/A	40 CFR Part 61, Subpart Y	Does not store benzene.
OC4PHST138	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart.
OC4PHST230	N/A	40 CFR Part 60, Subpart Kb	The storage vessel has a capacity of less than 19,800 gallons.
OC4PHST360	N/A	40 CFR Part 60, Subpart Kb	The storage vessel capacity is less than 19,800 gallons.
OC4PHST360	N/A	40 CFR Part 61, Subpart Y	This storage vessel does not store benzene and is not applicable to this subpart.
OC4PHST361	N/A	40 CFR Part 60, Subpart Kb	The storage vessel capacity is less than 19,800 gallons.
OC4PHST361	N/A	40 CFR Part 61, Subpart Y	The storage vessel does not store benzene and is not applicable to this subpart.
OC4PHST390	N/A	30 TAC Chapter 115, Storage of VOCs	This storage vessel does not store VOC and is not applicable to this chapter.
OC4PHST390	N/A	40 CFR Part 60, Subpart Kb	The storage vessel does not store VOL and is not applicable to this subpart.

### Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
OC4PHST390	N/A	40 CFR Part 61, Subpart Y	This storage vessel does not store benzene and is not applicable to this subpart.
OC4PHST486	N/A	30 TAC Chapter 115, Storage of VOCs	The storage vessel does not store VOCs and is not applicable to this chapter.
OC4PHST486	N/A	40 CFR Part 60, Subpart Kb	The storage vessel does not store VOL and is not applicable to this subpart.
OC4PHST486	N/A	40 CFR Part 61, Subpart Y	The storage vessel does not store benzene and is not applicable to this subpart.
OC4PHST496	N/A	30 TAC Chapter 115, Storage of VOCs	The storage vessel capacity is less than 1,000 gallons.
OC4PHST496	N/A	40 CFR Part 60, Subpart Kb	The storage vessel does not store VOL and is not applicable to this subpart.
OC4PHST496	N/A	40 CFR Part 61, Subpart Y	The storage vessel does not store benzene and is not applicable to this subpart.
OC4PHST507	N/A	40 CFR Part 60, Subpart Kb	The storage vessel capacity is less than 19,800 gallons.
OC4PHST507	N/A	40 CFR Part 61, Subpart Y	The storage vessel does not store benzene and is not applicable to this subpart.
OC4PHST510	N/A	40 CFR Part 60, Subpart Kb	The storage vessel capacity is less than 19,800 gallons.
OC4PHST510	N/A	40 CFR Part 61, Subpart Y	The storage vessel does not store benzene and is not applicable to this subpart.

### Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
OC4PHST5628	N/A	30 TAC Chapter 115, Storage of VOCs	The storage vessel capacity is less than 1,000 gallons.
OC4PHST5628	N/A	40 CFR Part 60, Subpart Kb	The storage vessel capacity is less than 19,800 gallons.
OC4PHST5628	N/A	40 CFR Part 61, Subpart Y	The storage vessel does not store benzene and is not applicable to this subpart.
OC4PHST5648	N/A	30 TAC Chapter 115, Storage of VOCs	The storage vessel capacity is less than 1,000 gallons.
OC4PHST5648	N/A	40 CFR Part 60, Subpart Kb	The storage vessel capacity is less than 19,800 gallons.
OC4PHST5648	N/A	40 CFR Part 61, Subpart Y	The storage vessel does not store benzene and is not applicable to this subpart.
OC4PHST660	N/A	40 CFR Part 60, Subpart Kb	The storage vessel capacity is less than 19,800 gallons.
OC4PHST680	N/A	40 CFR Part 60, Subpart Kb	Pressure vessel is designed to operate in excess of 204.9 kPa and without emissions to the atmosphere.
OC4PHST680	N/A	40 CFR Part 61, Subpart Y	The storage vessel does not store benzene and is not applicable to this subpart.
OC4PHST681	N/A	40 CFR Part 60, Subpart Kb	Process vessel is designed to operated in excess of 204.9 kPa and without emissions to the atmosphere.

### Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
OC4PHST681	N/A	40 CFR Part 61, Subpart Y	The storage vessel does not store benzene and is not applicable to this subpart.
OC4PHST750	N/A	30 TAC Chapter 115, Storage of VOCs	The storage vessel does not store VOCs and is not applicable to this subpart.
OC4PHST750	N/A	40 CFR Part 60, Subpart Kb	The storage vessel does not store VOL and is not applicable to this subpart.
OC4PHST750	N/A	40 CFR Part 61, Subpart Y	The storage vessel does not store benzene and is not applicable to this subpart.
OC4PHST760	N/A	40 CFR Part 60, Subpart Kb	The storage vessel has a capacity greater than or equal to 151 cubic meters (39,900 gallons) and true vapor pressure is less than 0.5 psia.
OC4PHST760	N/A	40 CFR Part 61, Subpart Y	The storage vessel does not store benzene and is not applicable to this subpart.
OC4PHST761	N/A	40 CFR Part 60, Subpart Kb	The storage vessel has a capacity greater than or equal to 151 cubic meters (39,900 gallons) and true vapor pressure is less than 0.5 psia.
OC4PHST761	N/A	40 CFR Part 61, Subpart Y	The storage vessel does not store benzene and is not applicable to this subpart.
OC4PHST838	N/A	30 TAC Chapter 115, Storage of VOCs	The storage vessel capacity is less than 1,000 gallons.
OC4PHST838	N/A	40 CFR Part 60, Subpart Kb	The storage vessel capacity is less than 19,800 gallons.

### Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
OC4PHST838	N/A	40 CFR Part 61, Subpart Y	The storage vessel does not store benzene and is not applicable to this subpart.
OC4PHST839	N/A	30 TAC Chapter 115, Storage of VOCs	The storage vessel capacity is less than 1,000 gallons.
OC4PHST839	N/A	40 CFR Part 60, Subpart Kb	The storage vessel capacity is less than 19,800 gallons.
OC4PHST839	N/A	40 CFR Part 61, Subpart Y	The storage vessel does not store benzene and is not applicable to this subpart.
OC4PHST840	N/A	30 TAC Chapter 115, Storage of VOCs	The storage vessel capacity is less than 1,000 gallons.
OC4PHST840	N/A	40 CFR Part 60, Subpart Kb	The storage vessel capacity is less than 19,800 gallons.
OC4PHST840	N/A	40 CFR Part 61, Subpart Y	The storage vessel does not store benzene and is not applicable to this subpart.
OC4PHST841	N/A	30 TAC Chapter 115, Storage of VOCs	The storage vessel capacity is less than 1,000 gallons.
OC4PHST841	N/A	40 CFR Part 60, Subpart Kb	The storage vessel capacity is less than 19,800 gallons.
OC4PHST860	N/A	30 TAC Chapter 115, Storage of VOCs	The storage vessel capacity is less than 1,000 gallons.
OC4PHST860	N/A	40 CFR Part 60, Subpart Kb	The storage vessel capacity is less than 19,800 gallons.



### Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
OC4PHST860	N/A	40 CFR Part 61, Subpart Y	The storage vessel does not store benzene and is not applicable to this subpart.
OC4PHST905	N/A	30 TAC Chapter 115, Storage of VOCs	The storage vessel does not store VOCs and is not applicable to this chapter.
OC4PHST905	N/A	40 CFR Part 60, Subpart Kb	The storage vessel does not store VOL and is not applicable to this subpart.
OC4PHST905	N/A	40 CFR Part 61, Subpart Y	This storage vessel does not store benzene and is not applicable to this subpart.
OC4PHST910	N/A	30 TAC Chapter 115, Storage of VOCs	The storage vessel does not store VOCs and is not applicable to this chapter.
OC4PHST910	N/A	40 CFR Part 60, Subpart Kb	The storage vessel does not store VOL and is not applicable to this subpart.
OC4PHST910	N/A	40 CFR Part 61, Subpart Y	The storage vessel does not store benzene and is not applicable to this subpart.
OC4PHSTMXC	N/A	30 TAC Chapter 115, Storage of VOCs	The storage vessel capacity is less than 1,000 gallons.
OC4PHSTMXC	N/A	40 CFR Part 60, Subpart Kb	The storage vessel capacity is less than 19,800 gallons.
OC4PHSTMXC	N/A	40 CFR Part 61, Subpart Y	The storage vessel does not store benzene and is not applicable to this subpart.
OC4PHSTNAL	N/A	30 TAC Chapter 115, Storage of VOCs	The storage vessel capacity is less than 1,000 gallons.

### Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
OC4PHSTNAL	N/A	40 CFR Part 60, Subpart Kb	The storage vessel capacity is less than 19,800 gallons.
OC4PHSTNAL	N/A	40 CFR Part 61, Subpart Y	The storage vessel does not store benzene and is not applicable to this subpart.
OC4PHSV485	N/A	30 TAC Chapter 115, Vent Gas Controls	The vent gas stream does not contain VOCs.
OC4PHUL13	N/A	30 TAC Chapter 115, Loading and Unloading of VOC	Transfer operations do not contain VOCs.
OC4PHUL15	N/A	30 TAC Chapter 115, Loading and Unloading of VOC	Transfer operations do not contain VOCs.
OC4PHUL2	N/A	30 TAC Chapter 115, Loading and Unloading of VOC	Transfer operation does not contain VOCs.
OC4PHUL5	N/A	30 TAC Chapter 115, Loading and Unloading of VOC	Transfer operations do not contain VOCs.
PROPDH1	N/A	30 TAC Chapter 115, Industrial Wastewater	Unit does not handle affected wastewater streams with either a VOC concentration greater than or equal to 10,000 ppmw or a VOC concentration greater than or equal to 1,000 ppmw & a flow rate greater than or equal to 10 liters per minute.

**New Source Review Authorization References**

<b>New Source Review Authorization References.....</b>	<b>146</b>
<b>New Source Review Authorization References by Emission Unit .....</b>	<b>147</b>

### New Source Review Authorization References

The New Source Review authorizations listed in the table below are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Prevention of Significant Deterioration (PSD) Permits	
PSD Permit No.: PSDTX1314M1	Issuance Date: 07/10/2015
Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.	
Authorization No.: 100787	Issuance Date: 07/10/2015
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.371	Version No./Date: 09/04/2000
Number: 106.454	Version No./Date: 11/01/2001
Number: 106.472	Version No./Date: 09/04/2000
Number: 106.475	Version No./Date: 09/04/2000
Number: 106.476	Version No./Date: 09/04/2000
Number: 106.511	Version No./Date: 09/04/2000

### New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
OC4PHCT900	COOLING TOWER CT-900	100787, PSDTX1314M1
OC4PHDL460	CATALYST DRUM LOADING FROM D-460	100787, PSDTX1314M1
OC4PHDU210	DEPROPANIZER COLUMN T-210	100787, PSDTX1314M1
OC4PHDU220	DEPROPANIZER COLUMN T-220	100787, PSDTX1314M1
OC4PHDU610	DEETHANIZER COLUMN T-610	100787, PSDTX1314M1
OC4PHDU620	DEETHANIZER COLUMN T-620	100787, PSDTX1314M1
OC4PHDU650	C3 SPLITTER COLUMN T-650	100787, PSDTX1314M1
OC4PHF9551	MULTI-POINT GROUND FLARE FX-955 (ROUTINE)	100787, PSDTX1314M1
OC4PHF9552	MULTI-POINT GROUND FLARE FX-955 (MSS)	100787, PSDTX1314M1
OC4PHF956	MEROX ELEVATED FLARE FS-956	100787, PSDTX1314M1
OC4PHF957	LOW PRESSURE FLARE FS-957	100787, PSDTX1314M1
OC4PHFU2	PROCESS AREA FUGITIVES	100787, PSDTX1314M1
OC4PHGE001	BACKUP GENERATOR, DG-1001	106.511/09/04/2000
OC4PHGE860	BACKUP GENERATOR DG-860	100787, PSDTX1314M1
OC4PHGE860	BACKUP GENERATOR, DG-860	100787, PSDTX1314M1
OC4PHH310	HEATER H-310	100787, PSDTX1314M1
OC4PHH320	HEATER H-320	100787, PSDTX1314M1
OC4PHH320	HEATER, H-320	100787, PSDTX1314M1
OC4PHH330	HEATER H-330	100787, PSDTX1314M1

### New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
OC4PHH330	HEATER, H-330	100787, PSDTX1314M1
OC4PHH340	HEATER H-340	100787, PSDTX1314M1
OC4PHH340	HEATER, H-340	100787, PSDTX1314M1
OC4PHLR16	SPENT LUBE OIL LOADING	106.472/09/04/2000
OC4PHLR1	TANK TRUCK LOADING FROM D-138	100787, PSDTX1314M1
OC4PHLR7	USED OIL LOADING	106.472/09/04/2000
OC4PHMEHFP	HEATER FUEL PURGE	100787, PSDTX1314M1
OC4PHO470	CATALYST UNLOADING	100787, PSDTX1314M1
OC4PHPV450	R-450 REGEN TOWER	100787, PSDTX1314M1
OC4PHPV497	BLOWER LUBE OIL COLLECTION POT, V-497	106.472/09/04/2000
OC4PHPV512	REC LUBE OIL COLLECTION POT, V-512	106.472/09/04/2000
OC4PHPV513	REC LUBE OIL RUNDOWN TANK (1ST. STAGE), D-513	106.472/09/04/2000
OC4PHPV516	REC LUBE OIL RUNDOWN TANK(2ND STAGE), D-516	106.472/09/04/2000
OC4PHPV5621	HP TURBO LUBE OIL RUNDOWN TANK, V-5621	106.472/09/04/2000
OC4PHPV5641	LP TURBO LUBE OIL RUNDOWN TANK, V-5641	106.472/09/04/2000
OC4PHPV662	HPC LUBE OIL COLLECTION POT TANK, V-662	106.472/09/04/2000
OC4PHPV663	HPC LUBE OIL RUNDOWN TANK, D-663	106.472/09/04/2000
OC4PHPV677	PPC LUBE OIL RUNDOWN TANK, D-677	106.472/09/04/2000
OC4PHPV820	D-820 DE-AERATOR DRUM STEAM VENT	100787, PSDTX1314M1

### New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
OC4PHPV834	LUBE OIL COLLECTION VESSEL TANK, V-834	106.472/09/04/2000
OC4PHPV836	LUBE OIL COLLECTION VESSEL TANK, V-836	106.472/09/04/2000
OC4PHRX132	R-132 MEROX OXIDIZER	100787, PSDTX1314M1
OC4PHRX193	R-193 SHP REACTOR	100787, PSDTX1314M1
OC4PHRX311	REACTOR R-311	100787, PSDTX1314M1
OC4PHRX321	REACTOR R-321	100787, PSDTX1314M1
OC4PHRX331	REACTOR R-331	100787, PSDTX1314M1
OC4PHRX341	REACTOR R-341	100787, PSDTX1314M1
OC4PHSC1	MAINTENANCE DEGREASER	106.454/11/01/2001
OC4PHSC2	MAINTENANCE DEGREASER	106.454/11/01/2001
OC4PHSP133	D-133 DISULFIDE SEPARATOR	100787, PSDTX1314M1
OC4PHSP548	D-548 WASTEWATER DECANTER	100787, PSDTX1314M1
OC4PHST001	DIESEL STORAGE TANK, DG-1001	106.472/09/04/2000
OC4PHST122	STORAGE TANK, V-122	100787, PSDTX1314M1
OC4PHST138	DISULFIDE OIL STORAGE TANK	106.476/09/04/2000
OC4PHST230	MIXED C4+ STORAGE TANK, D-230	106.476/09/04/2000
OC4PHST360	DMDS STORAGE TANK, D-360	100787, PSDTX1314M1
OC4PHST361	SULFUR INJECTION DRUM, D-361	100787, PSDTX1314M1
OC4PHST390	NEUTRALIZATION STORAGE TANK, V-390	106.472/09/04/2000

### New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
OC4PHST486	SODIUM HYDROGEN SULPHATE STORAGE TANK, V-486	106.472/09/04/2000
OC4PHST496	BLOWER LUBE OIL RESERVOIR, D-496	106.472/09/04/2000
OC4PHST507	SOLVENT STORAGE TANK, D-507	100787, PSDTX1314M1
OC4PHST510	REC LUBE OIL RESERVOIR, V-510	106.472/09/04/2000
OC4PHST5628	HP TURBO EXPANDER LUBE OIL RESERVOIR V-5628	106.472/09/04/2000
OC4PHST5648	LOW TURBO EXPANDER LUBE OIL RESERVOIR V-5648	106.472/09/04/2000
OC4PHST660	HPC LUBE OIL RESERVOIR, V-660	106.472/09/04/2000
OC4PHST680	PROPYLENE STORAGE TANK, D-680	106.476/09/04/2000
OC4PHST681	OFF-SPEC PRODUCT STORAGE TANK, D-681	106.476/09/04/2000
OC4PHST750	CAUSTIC STORAGE TANK V-750	100787, PSDTX1314M1
OC4PHST760	WASTEWATER STORAGE TANK, V-760	106.472/09/04/2000
OC4PHST761	WASTEWATER STORAGE TANK, V-761	106.472/09/04/2000
OC4PHST838	LUBE OIL RESERVOIR D-838	106.472/09/04/2000
OC4PHST839	LUBE OIL RESERVOIR D-839	106.472/09/04/2000
OC4PHST840	LUBE OIL RESERVOIR D-840	106.472/09/04/2000
OC4PHST841	LUBE OIL RESERVOIR D-841	106.472/09/04/2000
OC4PHST860	DG-860 DIESEL STORAGE TANK	106.472/09/04/2000
OC4PHST905	HCL STORAGE TANK V-905	100787, PSDTX1314M1
OC4PHST910	SAFETY SHOWER STORAGE TANK V-910	106.472/09/04/2000



### New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
OC4PHSTMXC	MEROX CATALYST STORAGE TANK	106.472/09/04/2000
OC4PHSTNAL	NALCO TOTES	106.371/09/04/2000
OC4PHSV485	CCR VENT SCRUBBER, T-485	100787, PSDTX1314M1
OC4PHUL10	MEA UNLOADING TO V-122	100787, PSDTX1314M1
OC4PHUL11	METHANOL UNLOADING TO D-951	100787, PSDTX1314M1
OC4PHUL12	NALCO TOTE UNLOADING TO V-901	106.371/09/04/2000
OC4PHUL13	NALCO TOTE UNLOADING TO V-902	106.371/09/04/2000
OC4PHUL14	NALCO TOTE UNLOADING TO V-903	106.371/09/04/2000
OC4PHUL15	NALCO TOTE UNLOADING TO V-904	106.371/09/04/2000
OC4PHUL17	DIESEL UNLOADING INTO VESSELS	106.472/09/04/2000
OC4PHUL2	TRUCK UNLOADING TO V-390	106.472/09/04/2000
OC4PHUL5	TOTE UNLOADING TO V-486	106.472/09/04/2000
OC4PHUL6	LUBE OIL UNLOADING	106.472/09/04/2000
OC4PHUL8	DMDS TANK TRUCK UNLOADING TO D-360	100787, PSDTX1314M1
OC4PHUL9	WASH OIL TANK TRUCK UNLOADING TO D-507	100787, PSDTX1314M1
PROPDH1A	PDH-1 PROCESS UNIT - MON BATCH PROCESS VENTS	100787, PSDTX1314M1
PROPDH1	PDH-1 PROCESS UNIT	100787, PSDTX1314M1

**Alternative Requirement**

**Alternative Requirement..... 153**

Bryan W. Shaw, Ph.D., P.E., *Chairman*  
Toby Baker, *Commissioner*  
Richard A. Hyde, P.E., *Executive Director*



**TEXAS COMMISSION ON ENVIRONMENTAL QUALITY**  
*Protecting Texas by Reducing and Preventing Pollution*

September 9, 2015

RETURN RECEIPT REQUESTED #####

MS. CHERYL STEVES  
ENVIRONMENTAL MANAGER  
THE DOW CHEMICAL COMPANY  
2301 N. BRAZOSPORT BLVD, BLDG B-101  
FREEPORT, TEXAS 77541-3203

Re: Alternative Means of Control for 30 TAC Chapter 115  
AMOC Number: AMOC-8  
The Dow Chemical Company  
PDH and LHC-9 Plants, Texas Operations  
Freeport, Brazoria County  
Regulated Entity Number: RN100225945  
Customer Reference Number: CN600356976  
Affected Permit(s): 100787

Dear Ms. Steves:

The Executive Director of the Texas Commission on Environmental Quality (TCEQ) has made a final decision to approve your above-referenced Alternate Means of Control (AMOC) Plan. Enclosed you will find the authorized AMOC Plan and Provisions. No comments were received during the 30-day comment period; however, minor changes have been made to the final AMOC Plan to reflect changes made to the final corresponding Alternate Means of Emission Limitation approved by the U.S. Environmental Protection Agency (EPA).

Please note you have an opportunity to appeal the Executive Director's determination on the AMOC Plan to the commission within 15 days from the date of receipt of this letter under Title 30 Texas Administrative Code § 115.914(7) (30 TAC § 115.914(7)). Also, under 30 TAC § 115.914(8), the EPA has 45 days from the date of the TCEQ's final approval of the AMOC Plan to inform the Air Permits Division that it disapproves the AMOC Plan. Per § 115.914(9)-(11), the AMOC plan will become effective with the latter of either EPA acceptance of, or the Commission's issuance of the AMOC plan. Once effective, the AMOC becomes part of the State Implementation Plan. It will allow Dow to use the multi-point ground flares with the specified provisions as an alternative to complying with 30 TAC Chapter 115.

This AMOC Plan and Provisions supersede certain requirements in Permit(s) No. 100787. To ensure effective and consistent enforceability, we request that Dow incorporate this AMOC Plan and Provisions into the permit(s) through an alteration or amendment no later than 90 days after this approval. This AMOC Plan and Provisions change applicable requirements for the site, including existing monitoring, reporting, recordkeeping, and testing requirements which may have implications for the applicability of any Site Operating Permit (SOP) requirements.

Ms. Steves

Page 2

September 9, 2015

Re AMOC Number: AMOC-8

This action is taken under authority delegated by the Executive Director of the TCEQ.  
If you have any questions, please call Ms. Dana Poppa Vermillion, P.E. at (512) 239-1280, or  
write to the Texas Commission on Environmental Quality, Office of Air, Air Permits Division,  
MC-163, P.O. Box 13087, Austin, Texas 78711-3087.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael Wilson".

Michael Wilson, P.E., Director  
Air Permits Division  
Texas Commission on Environmental Quality

Enclosures

Project No.: 197013

cc: Air Section Manager, Region 12 - Houston

## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



**Alternative Method of Control (AMOC) Plan  
Authorization AMOC No.: AMOC-8  
The Dow Chemical Company, Freeport, Brazoria County  
Regulated Entity Number: RN100225945**

1. This AMOC plan authorization shall apply to the Dow Chemical Company, Texas Operations. The facilities are covered by TCEQ Regulated Entity Number RN 100225945.
2. A copy of the application and the AMOC Plan Authorization conditions must be kept on-site or at a centralized location and made available at the request of personnel from the TCEQ or any air pollution control agency with appropriate jurisdiction. The application is defined by the AMOC application dated August 20, 2013 and subsequent supporting documents dated February 18, 2014.
3. This authorization is granted under Title 30 Texas Administrative Code §115.910 (30 TAC §115.910) and addresses issues associated with the use of these flare systems for emission sources regulated by 30 TAC 115 Subchapters B through H, as applicable, including 30 TAC §115.722(d) and §115.722(d)(2), and shall apply in lieu thereof. Compliance with this AMOC is independent of Dow Chemical's obligation to comply with all other TCEQ permits and all other applicable TCEQ Regulations.
4. The following stationary pressure-assisted flares are covered under this AMOC plan: PDH-1 Flare (EPN OC4F9552) and LHC-9 Flare (EPN OC2F9562). The flare tips covered under the AMOC plan are pressure-assisted flare tips that consist of flare tip arms with small holes for the waste gas. These flare tips use the waste gas pressure to create a condition whereby ambient air is drawn into contact with the gas, and mixed with the gas in such a manner to achieve smokeless combustion.
5. The flares shall be designed and operated in accordance with the following requirements:
  - A. The flare systems shall be designed and operated such that the waste gas stream flowing to each pressure-assisted flare system meets a minimum net heating value of 800 BTU/scf or a lower flammability limit of the combustion zone gas of less than or equal to 6.5 percent by volume on a 15 minute block average basis under normal, upset, maintenance, start-up and shutdown flow conditions when the flare system is operated with the pressure-assisted flare tips in service. The net heating value or lower flammability limit shall be satisfied at all times during operations authorized by the AMOC unless the

flare systems meet the 40 CFR §60.18 specifications of minimum heating value and maximum tip velocity. Flare testing per 40 CFR §60.18(f) may be requested by the appropriate regional office to demonstrate compliance with these requirements. The minimum net heating value and lower flammability limit shall be calculated using the methodologies in the Appendix of this document.

- B. Each flare system shall be operated with a flame present at all times when in use. Each stage of the pressure-assisted flare system shall have at least two pilots in service with a continuously lit pilot flame. The pilot flame(s) shall be continuously monitored by a thermocouple or any other equivalent device. The time, date, and duration of any loss of pilot flame shall be recorded. Each monitoring device shall be maintained or replaced at a frequency in accordance with the manufacturer's specifications.
  - C. Each flare system shall be operated with no visible emissions except for periods not to exceed a total of 5 minutes during any two consecutive hours. A video camera must be used in order to conduct visible emission observations since operating personnel cannot enter the fenced area while the MPGF flare is operating.
  - D. The pressure of the waste gas stream flowing through the main plant header to the pressure-assisted flare tips must be 6.0 psig or greater on a 15 minute block average basis in order to support proper combustion and limit visible emissions. The pressure of the waste gas stream flowing through the main plant flare header(s) shall be monitored by a pressure monitoring system and the 15 minute block average pressure must be recorded for a period of two years from the date of measurement. Each flare system will also be equipped with a valve position indicator monitoring system for each staging valve to ensure that the multi-point ground flare operates within the range of tested conditions or within the range of the manufacturer's specifications.
- 6. The operator shall install and operate an on-line vent gas flow meter and an on-line gas chromatograph to measure the flow and composition of the vent gas to each flare. The owner or operator may also install, operate, calibrate, and maintain a calorimeter capable of continuously measuring, calculating, and recording the net heating value of the vent gas. The flow rate and composition, and/or the net heating value of the vent gas shall be measured and recorded on a 15 minute block average. The operator shall comply with all Monitoring and Testing Requirements and all Recordkeeping and Reporting Requirements for these monitoring systems as specified in 30 TAC §§115.725 and 115.726, effective December 23, 2004.
  - 7. Compliance with the requirements of this plan does not assure compliance with requirements of an applicable New Source Performance Standard, and applicable National Emission Standard for Hazardous Air Pollutants or Alternative Means of Emission Limitation and does not constitute approval of alternative standards for these regulations.

## APPENDIX

### Equations for Calculations Referenced in Special Condition No. 5.A.

#### Net Heating Value of Waste Gas Stream (Btu/scf)

Option #1 - The owner or operator shall determine the net heating value of the vent gas using the following equation if using the analytical results from an on-line gas chromatograph:

$$NHV_{vg} = \sum_{i=1}^n x_i NHV_i$$

Where:

$NHV_{vg}$  = Net heating of the flare vent gas, Btu/scf, British thermal units per standard cubic foot (Btu/scf). Flare vent gas means all gas found just prior to the MPGF. This gas includes all flare waste was (i.e., gas from facility operations that is directed to a flare for the purpose of disposing of the gas), flare sweep gas, flare purge gas and flare supplemental gas, but does not include pilot gas.

$i$  = Individual component in flare vent gas

$n$  = Number of components in flare vent gas

$x_i$  = Concentration of component  $i$  in flare vent gas, volume fraction

$NHV_i$  = Net heating value of component  $i$  using either the values in table 1 below or a published value where the net enthalpy per mole of offgas is based on combustion at 25 °C and 1 atmosphere (or constant pressure) with water in the gaseous state, but the standard temperature for determining the volume corresponding to one mole of vent gas is 20 °C.

Option #2 – The owner or operator can use the value directly measured if an on-line calorimeter is used to measure, calculate, and record the net heating value of the waste gas stream at standard conditions (Btu/scf).

### **Lower Flammability of Combustion Zone Gas (LFL Volume %)**

For this flare design, the Lower Flammability Limit of the combustion zone gas is the same as the Lower Flammability Limit of the vent gas since there is no flow of steam or premix assist air. The equation for calculating the Lower Flammability Limit of the vent gas stream is provided below:

$$LFL_{vg} = \frac{1}{\sum_{i=1}^n \left( \frac{X_i}{LFL_i} \right)}$$

Where:

$LFL_{vg}$  = Lower flammability limit of flare vent gas, volume fraction

$n$  = Number of components in the vent gas

$i$  = Individual component in the vent gas

$X_i$  = Concentration of component  $i$  in the vent gas, volume percent

$LFL_i$  = Lower flammability limit of component  $i$  as determined using values published by the U.S. Bureau of Mines (Zabetakis, 1965), vol %. All inerts, including nitrogen, are assumed to have an infinite lower flammability limit (e.g., LFL of nitrogen = infinity), so that the mol fraction of nitrogen divided by the LFL of nitrogen = 0). LFL values for common flare vent gas components are provided in Table 1, and may also be used in these calculations. The  $LFL_{vg}$  is then multiplied by 100 to convert the results from volume fraction to volume%.



Table 1 – Individual Component Properties

Component	NHV (British thermal units per standard cubic foot)	LFL (volume %)
Acetylene	1,404	2.5
Benzene	3,591	1.3
1,2-Butadiene	2,794	2.0
1,3-Butadiene	2,690	2.0
Iso-Butane	2,957	1.8
n-Butane	2,968	1.8
cis-Butene	2,830	1.6
iso-Butene	2,928	1.8
trans-Butene	2,826	1.7
Carbon Dioxide	0	Infinity
Carbon Monoxide	316	12.5
Cyclopropane	2,185	2.4
Ethane	1,595	3.0
Ethylene	1,477	2.7
Hydrogen	274	4.0
Methane	896	5.0
Methyl-Acetylene	2,088	1.7
Nitrogen	0	Infinity
Oxygen	0	Infinity
Pentane + (C5+)	3,655	1.4
Propadiene	2,066	2.16
Propane	2,281	2.1
Propylene	2,150	2.4
Water	0	Infinity

For the reasons discussed in the preamble, the Coast Guard proposes to amend 33 CFR part 117 as follows:

#### **PART 117—DRAWBRIDGE OPERATION REGULATIONS**

1. The authority citation for part 117 continues to read as follows:

**Authority:** 33 U.S.C. 499; 33 CFR 1.05–1; Department of Homeland Security Delegation No. 0170.1.

2. In § 117.217, revise paragraph (b) to read as follows:

##### **§ 117.217 Norwalk River.**

\* \* \* \* \*

(b) The Metro-North WALK Bridge at mile 0.1, across the Norwalk River, at Norwalk, Connecticut shall operate as follows:

(1) The draw shall open on signal between 4:30 a.m. and 9 p.m. after at least a two hour advance notice is given; except that, from 4:30 a.m. through 9:30 a.m. and from 4 p.m. through 9 p.m., Monday through Friday excluding holidays, the draw need not open for the passage of vessel traffic unless an emergency exists.

(2) From 9 p.m. through 4:30 a.m. the draw shall open on signal after at least a four hour advance notice is given.

(3) A delay in opening the draw not to exceed 10 minutes may occur when a train scheduled to cross the bridge without stopping has entered the drawbridge lock.

(4) Requests for bridge openings may be made by calling the bridge via marine radio VHF FM Channel 13 or the telephone number posted at the bridge.

Dated: August 20, 2015.

**L.L. Fagan,**  
*Rear Admiral, U.S. Coast Guard, Commander,  
First Coast Guard District.*

[FR Doc. 2015–21531 Filed 8–28–15; 8:45 am]

**BILLING CODE 9110–04–P**

#### **ENVIRONMENTAL PROTECTION AGENCY**

##### **40 CFR Parts 60, 61 and 63**

**[EPA–HQ–OAR–2014–0738; FRL–9933–16–OAR]**

**Notice of Final Approval for the Operation of Pressure-Assisted Multi-Point Ground Flares at The Dow Chemical Company and ExxonMobil Chemical Company and Notice of Receipt of Approval Request for the Operation of a Pressure-Assisted Multi-Point Ground Flare at Occidental Chemical Corporation**

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Notice; approval and request for comments.

**SUMMARY:** This notice announces our approval of the Alternative Means of Emission Limitation (AMEL) requests for the operation of multi-point ground flares (MPGF) at The Dow Chemical Company's (Dow) Propane Dehydrogenation Plant and Light Hydrocarbons Plant located at its Texas Operations site in Freeport, Texas, and the ExxonMobil Chemical Company (ExxonMobil) Olefins Plant in Baytown, Texas, and its Plastics Plant in Mont Belvieu, Texas. This approval notice also specifies the operating conditions and monitoring, recordkeeping, and reporting requirements for demonstrating compliance with the AMEL that these facilities must follow.

In addition, this notice solicits comments on all aspects of an AMEL request from Occidental Chemical Corporation (OCC) in which long-term MPGF burner stability and destruction efficiency have been demonstrated on different pressure-assisted MPGF burners that OCC has proposed for use in controlling emissions at its Ingleside, Texas, ethylene plant.

Lastly, this notice presents and solicits comments on all aspects of a framework of both MPGF burner testing and rule-specific emissions control equivalency demonstrations that we anticipate, when followed, would afford us the ability to approve future AMEL requests for MPGF in a more efficient and streamlined manner.

**DATES:** The AMEL for the MPGF at Dow's Propane Dehydrogenation Plant and Light Hydrocarbons Plant located at its Texas Operations site in Freeport, Texas, and ExxonMobil's Olefins Plant in Baytown, Texas, and Plastics Plant in Mont Belvieu, Texas are approved and effective August 31, 2015.

**Comments.** Written comments on the AMEL request from OCC for their MPGF in Ingleside, Texas, or on the framework for streamlining future MPGF AMEL requests must be received on or before October 15, 2015.

**Public Hearing.** Regarding the OCC MPGF in Ingleside, Texas, or the framework for streamlining future MPGF AMEL requests, if requested by September 8, 2015, we will hold a public hearing on September 15, 2015, from 1:00 p.m. [Eastern Standard Time] to 8:00 p.m. [Eastern Standard Time] in Corpus Christi, Texas. We will provide details on the public hearing on our Web site at: <http://www.epa.gov/ttn/atw/groundflares/groundflarespg.html>. To be clear, a public hearing will not be held unless someone specifically requests that the EPA hold a public

hearing regarding the OCC MPGF or the framework for streamlining future MPGF AMEL requests. Please contact Ms. Virginia Hunt of the Sector Policies and Programs Division (E143–01), Office of Air Quality Planning and Standards, Environmental Protection Agency, Research Triangle Park, NC 27711; telephone number: (919) 541–0832; email address: [hunt.virginia@epa.gov](mailto:hunt.virginia@epa.gov); to request a public hearing, to register to speak at the public hearing or to inquire as to whether a public hearing will be held. The last day to pre-register in advance to speak at the public hearing will be September 14, 2015.

**ADDRESSES:** Submit your comments, identified by Docket ID Number EPA–HQ–OAR–2014–0738, to the Federal eRulemaking Portal: <http://www.regulations.gov>. Follow the online instructions for submitting comments. Once submitted, comments cannot be edited or withdrawn. The EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. The EPA will generally not consider comments or comment contents located outside of the primary submission (i.e., on the web, cloud, or other file sharing system). For additional submission methods, the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit <http://www2.epa.gov/dockets/commenting-epa-dockets>.

**Instructions.** Direct your comments on the OCC MPGF or the framework for streamlining future MPGF AMEL requests to Docket ID Number EPA–HQ–OAR–2014–0738. The EPA's policy is that all comments received will be included in the public docket without change and may be made available online at <http://www.regulations.gov>, including any personal information provided, unless the comment includes information claimed to be confidential business information (CBI) or other information whose disclosure is restricted by statute. Do not submit information that you consider to be CBI or otherwise protected through <http://www.regulations.gov> or email. Send or deliver information identified as CBI only to the following address: OAQPS Document Control Officer (C404–02),

chemical composition of the gas discharged to a flare impact combustion efficiency and that the EPA did not verify or investigate whether the facilities seeking approval to operate under an AMEL will discharge gas to the proposed MPGF that is similar in chemical composition to the gas used in the tests used to develop the AMEL. Further, commenters' review of available data suggests that the facilities seeking approval to operate under an AMEL will discharge gas that exhibit hydrogen-olefin interactions.

*Response:* As we stated in the initial AMEL notice, one general conclusion made from the EPA's 1985 study is that stable flare flames and high (>98–99 percent) combustion and destruction efficiencies are attained when flares are operated within operating envelopes specific to each flare burner and gas mixture tested, and that operation beyond the edge of the operating envelope can result in rapid flame destabilization and a decrease in combustion and destruction efficiencies. The data where flameout of the burners occurred from test runs in both the Marathon 2012 test report and the Dow 2013 test report showed that the flare operating envelope was different for the different gas mixtures tested. Additionally, the data indicate that combustion degradation beyond the edge of the operating envelope for pressure-assisted MPGF burners is so rapid that when a flame is present, the flare will still achieve a high level of combustion efficiency right up until the point of flameout. The results of the available PFTIR testing demonstrated that when a flame was present on the pressure-assisted flare burners tested, an average combustion efficiency of 99 percent or greater was achieved. Since the initial AMEL notice, we received additional combustion efficiency test data that further confirms this observation (see OCC comments in Docket ID Number EPA–HQ–OAR–204–0738–0030). In other words, the critical parameter in ensuring that the MPGF will achieve equivalent efficiency is dependent on a stable MPGF burner flame rather than the actual combustion efficiency, which to date has always been 98 percent or better over the gas composition mixtures tested. Therefore, we do not find that there is a need to operate a continuous PFTIR to demonstrate continuous combustion efficiency for MPGF. Instead, we rely on the continuous measurement of net

heating value or lower flammability limit operating limits to ensure that the MPGF are operating well above the points of flame instability for the gas compositions evaluated. Further, based on our understanding of the PFTIR testing method, it is technically impracticable to operate a continuous PFTIR due to interferences that would be present for a continuous system on the multipoint array of burners in the MPGF (e.g., availability of multiple sight lines and changing ambient conditions such as rain or fog). However, in the event that technology advancements make the continuous demonstration of combustion efficiency feasible, we acknowledge that this may provide another means by which operators can demonstrate equivalence with existing standards. Finally, while it is true that, in the development of operating limits for refinery flares, we noted in the refinery proposal that a higher  $NHV_{cz}$  target was appropriate for some mixtures of olefins and hydrogen, the combustion zone operating limits we are finalizing in today's notice are significantly more stringent than combustion zone parameters developed for traditional elevated refinery flares, including those with hydrogen and olefins, which should alleviate any such concerns with respect to combustion efficiency for these types of gas mixtures. In addition, and as discussed elsewhere in this section, an olefinic gas mixture (i.e., propylene mixture) was tested and used to determine the  $NHV_{cz}$  and  $LFL_{cz}$  operating limits for the olefins plants applying for an AMEL. This gas mixture is both representative and challenging to the system with respect to the vent gas mixtures the MPGF will burn. In fact, when considering the full array of flare vent gas mixtures tested (e.g., natural gas mixtures in the Marathon test, propylene mixtures in the Dow test and ethylene mixtures in the OCC test) and their corresponding points of flare flame instability on the MPGF burners, no single data point has shown instability above the  $NHV_{cz}$  (or below the  $LFL_{cz}$ ) operating limits being finalized for Dow and ExxonMobil in Section III below.

*Comment:* One commenter suggested that flare minimization is also another important tool to mitigate the impact that MPGF will have on communities and suggested that the EPA require implementation of a flare management plan that requires facilities to:

- (1) Identify the sources of the gas routed to a flare;
- (2) Assess whether the gas routed to a flare can be minimized;
- (3) Describe each flare covered by the flare management plan;
- (4) Quantify the baseline flow rate to the flare after minimization techniques are implemented;
- (5) Establish procedures to minimize or eliminate discharges to the flare during startup and shutdown operations; and
- (6) If the flare is equipped with flare gas recovery, establish procedures to minimize downtime of the equipment.

*Response:* We consider the requirement to develop a flare management plan to be outside the scope of this AMEL. The purpose of this AMEL is to set site-specific conditions that an operator of a MPGF can use as an alternative to the existing requirements of 40 CFR 60.18 or 40 CFR 63.11 for flares, which do not include requirements for flare management plans.

### III. Final Notice of Approval of the AMEL Requests and Required Operating Conditions

Based on information the EPA received from Dow and ExxonMobil and the comments received through the public comment period, operating requirements for the pressure-assisted MPGF at both of Dow's plants and both of ExxonMobil's plants that will achieve a reduction in emissions at least equivalent to the reduction in emissions being controlled by a steam-assisted, air-assisted or non-assisted flare complying with the requirements of either 40 CFR 63.11(b) or 40 CFR 60.18(b) are as follows:

- (1) The MPGF system must be designed and operated such that the combustion zone gas net heating value ( $NHV_{cz}$ ) is greater than or equal to 800 Btu/scf or the combustion zone gas lower flammability limit ( $LFL_{cz}$ ) is less than or equal to 6.5 percent by volume. Owners or operators must demonstrate compliance with the  $NHV_{cz}$  or  $LFL_{cz}$  metric by continuously complying with a 15-minute block average. Owners or operators must calculate and monitor for the  $NHV_{cz}$  or  $LFL_{cz}$  according to the following:
  - (a) Calculation of  $NHV_{cz}$
  - (i) The owner or operator shall determine  $NHV_{cz}$  from compositional analysis data by using the following equation:



$$NHV_{vg} = \sum_{i=1}^n x_i NHV_i \quad (\text{Eqn. 1})$$

Where:

$NHV_{vg}$  = Net heating value of flare vent gas, British thermal units per standard cubic foot (Btu/scf). *Flare vent gas* means all gas found just prior to the MPGF. This gas includes all flare waste gas (*i.e.*, gas from facility operations that is directed to a flare for the purpose of disposing of the gas), flare sweep gas, flare purge gas and flare supplemental gas, but does not include pilot gas.

$i$  = Individual component in flare vent gas.  
 $n$  = Number of components in flare vent gas.  
 $x_i$  = Concentration of component  $i$  in flare vent gas, volume fraction.  
 $NHV_i$  = Net heating value of component  $i$  determined as the heat of combustion where the net enthalpy per mole of offgas is based on combustion at 25 degrees Celsius (°C) and 1 atmosphere (or constant pressure) with water in the gaseous state from values published in the literature, and then the values converted to a volumetric

basis using 20 °C for “standard temperature.” Table 1 summarizes component properties including net heating values.

(ii) FOR MPGF,  $NHV_{vg} = NHV_{cz}$ .

(b) Calculation of  $LFL_{cz}$ .

(i) The owner or operator shall determine  $LFL_{cz}$  from compositional analysis data by using the following equation:

$$LFL_{vg} = \frac{1}{\sum_{i=1}^n \left( \frac{\chi_i}{LFL_i} \right)} \quad (\text{Eqn. 2})$$

Where:

$LFL_{vg}$  = Lower flammability limit of flare vent gas, volume fraction.

$n$  = Number of components in the vent gas.

$i$  = Individual component in the vent gas.

$\chi_i$  = Concentration of component  $i$  in the vent gas, volume percent (vol %).

$LFL_i$  = Lower flammability limit of component  $i$  as determined using values published by the U.S. Bureau of Mines (Zabetakis, 1965), vol %. All inerts, including nitrogen, are assumed to have an infinite LFL (*e.g.*,  $LFL_{N_2} = \infty$ , so that  $\chi_{N_2}/LFL_{N_2} = 0$ ). LFL values for common flare vent gas components are provided in Table 1.

(ii) FOR MPGF,  $LFL_{vg} = LFL_{cz}$ .

(c) The operator of a MPGF system shall install, operate, calibrate and maintain a monitoring system capable of continuously measuring flare vent gas flow rate.

(d) The operator shall install, operate, calibrate and maintain a monitoring system capable of continuously measuring (*i.e.*, at least once every 15-minutes), calculating, and recording the individual component concentrations present in the flare vent gas or the owner or operator shall install, operate, calibrate and maintain a monitoring system capable of continuously

measuring, calculating and recording  $NHV_{vg}$ .

(e) For each measurement produced by the monitoring system, the operator shall determine the 15-minute block average as the arithmetic average of all measurements made by the monitoring system within the 15-minute period.

(f) The operator must follow the calibration and maintenance procedures according to Table 2. Maintenance periods, instrument adjustments or checks to maintain precision and accuracy and zero and span adjustments may not exceed 5 percent of the time the flare is receiving regulated material.

TABLE 1—INDIVIDUAL COMPONENT PROPERTIES

Component	Molecular formula	$MW_i$ (pounds per pound-mole)	$NHV_i$ (British thermal units per standard cubic foot)	$LFL_i$ (volume %)
Acetylene .....	$C_2H_2$ .....	26.04	1,404	2.5
Benzene .....	$C_6H_6$ .....	78.11	3,591	1.3
1,2-Butadiene .....	$C_4H_6$ .....	54.09	2,794	2.0
1,3-Butadiene .....	$C_4H_6$ .....	54.09	2,690	2.0
iso-Butane .....	$C_4H_{10}$ .....	58.12	2,957	1.8
n-Butane .....	$C_4H_{10}$ .....	58.12	2,968	1.8
cis-Butene .....	$C_4H_8$ .....	56.11	2,830	1.6
iso-Butene .....	$C_4H_8$ .....	56.11	2,928	1.8
trans-Butene .....	$C_4H_8$ .....	56.11	2,826	1.7
Carbon Dioxide .....	$CO_2$ .....	44.01	0	$\infty$
Carbon Monoxide .....	$CO$ .....	28.01	316	12.5
Cyclopropane .....	$C_3H_6$ .....	42.08	2,185	2.4
Ethane .....	$C_2H_6$ .....	30.07	1,595	3.0
Ethylene .....	$C_2H_4$ .....	28.05	1,477	2.7
Hydrogen .....	$H_2$ .....	2.02	274	4.0
Hydrogen Sulfide .....	$H_2S$ .....	34.08	587	4.0
Methane .....	$CH_4$ .....	16.04	896	5.0
Methyl-Acetylene .....	$C_3H_4$ .....	40.06	2,088	1.7
Nitrogen .....	$N_2$ .....	28.01	0	$\infty$
Oxygen .....	$O_2$ .....	32.00	0	$\infty$
Pentane+ (C5+) .....	$C_5H_{12}$ .....	72.15	3,655	1.4
Propadiene .....	$C_3H_4$ .....	40.06	2,066	2.16

TABLE 1—INDIVIDUAL COMPONENT PROPERTIES—Continued

Component	Molecular formula	$MW_i$ (pounds per pound-mole)	$NHV_i$ (British thermal units per standard cubic foot)	$LFL_i$ (volume %)
Propane .....	$C_3H_8$ .....	44.10	2,281	2.1
Propylene .....	$C_3H_6$ .....	42.08	2,150	2.4
Water .....	$H_2O$ .....	18.02	0	$\infty$

TABLE 2—ACCURACY AND CALIBRATION REQUIREMENTS

Parameter	Accuracy requirements	Calibration requirements
Flare Vent Gas Flow Rate ...	±20 percent of flow rate at velocities ranging from 0.1 to 1 feet per second. ±5 percent of flow rate at velocities greater than 1 foot per second.	Performance evaluation biennially (every two years) and following any period of more than 24 hours throughout which the flow rate exceeded the maximum rated flow rate of the sensor, or the data recorder was off scale. Checks of all mechanical connections for leakage monthly. Visual inspections and checks of system operation every 3 months, unless the system has a redundant flow sensor. Select a representative measurement location where swirling flow or abnormal velocity distributions due to upstream and downstream disturbances at the point of measurement are minimized.
Pressure .....	±5 percent over the normal range measured or 0.12 kilopascals (0.5 inches of water column), whichever is greater.	Review pressure sensor readings at least once a week for straight-line (unchanging) pressure and perform corrective action to ensure proper pressure sensor operation if blockage is indicated. Performance evaluation annually and following any period of more than 24 hours throughout which the pressure exceeded the maximum rated pressure of the sensor, or the data recorder was off scale. Checks of all mechanical connections for leakage monthly. Visual inspection of all components for integrity, oxidation and galvanic corrosion every 3 months, unless the system has a redundant pressure sensor. Select a representative measurement location that minimizes or eliminates pulsating pressure, vibration, and internal and external corrosion.
Net Heating Value by Calorimeter.	±2 percent of span .....	Calibration requirements should follow manufacturer's recommendations at a minimum. Temperature control (heated and/or cooled as necessary) the sampling system to ensure proper year-round operation. Where feasible, select a sampling location at least two equivalent diameters downstream from and 0.5 equivalent diameters upstream from the nearest disturbance. Select the sampling location at least two equivalent duct diameters from the nearest control device, point of pollutant generation, air in-leakages, or other point at which a change in the pollutant concentration or emission rate occurs.
Net Heating Value by Gas Chromatograph.	As specified in Performance Specification 9 of 40 CFR part 60, Appendix B.	Follow the procedure in Performance Specification 9 of 40 CFR part 60, Appendix B, except that a single daily mid-level calibration check can be used (rather than triplicate analysis), the multi-point calibration can be conducted quarterly (rather than monthly), and the sampling line temperature must be maintained at a minimum temperature of 60 °C (rather than 120 °C).

(2) The MPGF system shall be operated with a flame present at all times when in use. Each stage of MPGF burners must have at least two pilots with a continuously lit pilot flame. The pilot flame(s) must be continuously monitored by a thermocouple or any other equivalent device used to detect the presence of a flame. The time, date and duration of any complete loss of pilot flame on any stage of MPGF burners must be recorded. Each monitoring device must be maintained or replaced at a frequency in accordance with the manufacturer's specifications.

(3) The MPGF system shall be operated with no visible emissions except for periods not to exceed a total of 5 minutes during any 2 consecutive hours. A video camera that is capable of continuously recording (*i.e.*, at least one frame every 15 seconds with time and

date stamps) images of the flare flame and a reasonable distance above the flare flame at an angle suitable for visible emissions observations must be used to demonstrate compliance with this requirement. The owner or operator must provide real-time video surveillance camera output to the control room or other continuously manned location where the video camera images may be viewed at any time.

(4) The operator of a MPGF system shall install and operate pressure monitor(s) on the main flare header, as well as a valve position indicator monitoring system for each staging valve to ensure that the MPGF operates within the range of tested conditions or within the range of the manufacturer's specifications. The pressure monitor shall meet the requirements in Table 2.

Maintenance periods, instrument adjustments or checks to maintain precision and accuracy, and zero and span adjustments may not exceed 5 percent of the time the flare is receiving regulated material.

(5) Recordkeeping Requirements

(a) All data must be recorded and maintained for a minimum of three years or for as long as applicable rule subpart(s) specify flare records should be kept, whichever is more stringent.

(6) Reporting Requirements

(a) The information specified in (b) and (c) below should be reported in the timeline specified by the applicable rule subpart(s) for which the MPGF will control emissions.

(b) Owners or operators should include the following information in their initial Notification of Compliance status report:



(i) Specify flare design as a pressure-assisted MPGF.

(ii) All visible emission readings,  $NHV_{cz}$  and/or  $LFL_{cz}$  determinations and flow rate measurements. For MPGF, exit velocity determinations do not need to be reported as the maximum permitted velocity requirements in the General Provisions at 40 CFR 60.18 and 40 CFR 63.11 are not applicable.

(iii) All periods during the compliance determination when a complete loss of pilot flame on any stage of MPGF burners occurs.

(iv) All periods during the compliance determination when the pressure monitor(s) on the main flare header show the MPGF burners operating outside the range of tested conditions or outside the range of the manufacturer's specifications.

(v) All periods during the compliance determination when the staging valve position indicator monitoring system indicates a stage of the MPGF should not be in operation and is or when a stage of the MPGF should be in operation and is not.

(c) The owner or operator shall notify the Administrator of periods of excess emissions in their Periodic Reports. These periods of excess emissions shall include:

(i) Records of each 15-minute block during which there was at least one minute when regulated material was routed to the MPGF and a complete loss of pilot flame on a stage of burners occurred.

(ii) Records of visible emissions events that are time and date stamped and exceed more than 5 minutes in any 2 hour consecutive period.

(iii) Records of each 15-minute block period for which an applicable combustion zone operating limit (*i.e.*,  $NHV_{cz}$  or  $LFL_{cz}$ ) is not met for the MPGF when regulated material is being combusted in the flare. Indicate the date and time for each period, the  $NHV_{cz}$  and/or  $LFL_{cz}$  operating parameter for the period and the type of monitoring system used to determine compliance with the operating parameters (*e.g.*, gas chromatograph or calorimeter).

(iv) Records of when the pressure monitor(s) on the main flare header show the MPGF burners are operating outside the range of tested conditions or outside the range of the manufacturer's specifications. Indicate the date and time for each period, the pressure measurement, the stage(s) and number of MPGF burners affected and the range of tested conditions or manufacturer's specifications.

(v) Records of when the staging valve position indicator monitoring system indicates a stage of the MPGF should

not be in operation and is or when a stage of the MPGF should be in operation and is not. Indicate the date and time for each period, whether the stage was supposed to be open but was closed or vice versa and the stage(s) and number of MPGF burners affected.

#### IV. Notice of AMEL Request for Occidental Chemical Corporation

On December 16, 2014, OCC submitted an AMEL request indicating plans to construct an ethylene production unit that will be comprised of five ethane cracking furnaces and associated recovery equipment at its plant located in Ingleside, Texas. As part of this request, OCC described plans to control emissions from the ethylene production unit using two thermal oxidizers as both a primary and backup control device for periods of normal operation and low-pressure maintenance, startup, and shutdown events, and that it is seeking an AMEL for a MPGF installation for use during limited high-pressure maintenance, startup, and shutdown events as well emergency situations. As part of its AMEL request, as well as in its comments submitted to Docket ID Number EPA-HQ-OAR-2014-0738-0030 on March 30, 2015, during the Dow and ExxonMobil initial AMEL notice comment period, OCC requested an AMEL for use of different MPGF burners at its plant located in Ingleside, Texas, than the burners Dow and ExxonMobil plan to use at their plants. Specifically, OCC provided both destruction efficiency/combustion efficiency testing and long-term MPGF flame stability testing for ethylene and ethylene-inert waste gas mixtures on its proposed MPGF burners. These test data show good performance below an  $NHV_{cz}$  of 800 Btu/scf or above an  $LFL_{cz}$  of 6.5 volume percent, although OCC stated in the AMEL request that it plans to comply with the same compliance requirements laid out for Dow and ExxonMobil in Section III above. Therefore, we are seeking comment on whether these operating requirements would establish an AMEL for OCC that will achieve a reduction in emissions at least equivalent to the reduction in emissions for flares complying with the requirements in 40 CFR 63.11(b) or 40 CFR 60.18(b).

#### V. Notice of Framework for Streamlining Approval of Future Pressure-Assisted MPGF AMEL Requests

We are seeking comments on a framework sources may use to submit an AMEL request to the EPA to use MPGF as control devices to comply with

NSPS and NESHAP under 40 CFR parts 60, 61, and 63. At a minimum, sources considering use of MPGF as an emissions control technology should provide the EPA with the following information in its AMEL request when demonstrating MPGF equivalency:

(1) Project Scope and Background

(a) Size and scope of plant, products produced, location of facility and the MPGF proximity, if less than 2 miles, to the local community and schools.

(b) Details of overall emissions control scheme (*e.g.*, low pressure control scenario and high pressure control scenario), MPGF capacity and operation (including number of rows (stages), number of burners and pilots per stage and staging curve), and MPGF control utilization (*e.g.*, handles routine flows, only flows during periods of startup, shutdown, maintenance, emergencies).

(c) Details of typical and/or anticipated flare waste gas compositions and profiles for which the MPGF will control.

(d) MPGF burner design including type, geometry, and size.

(e) Anticipated date of startup.

(2) Regulatory Applicability

(a) Detailed list or table of applicable regulatory subparts, applicable standards that allow use of flares, and authority that allows for use of an AMEL.

(3) Destruction Efficiency/Combustion Efficiency Performance Demonstration

(a) Sources must provide a performance demonstration to the agency that the MPGF pressure-assisted burner being proposed for use will achieve a level of control at least equivalent to the most stringent level of control required by the underlying standards (*e.g.*, 98% destruction efficiency or better). Facilities can elect to do a performance test that includes a minimum of three test runs under the most challenging conditions (*e.g.*, highest operating pressure and/or sonic velocity conditions) using PFTIR testing, extractive sampling or rely on an engineering assessment. Sources must test using fuel representative of the type of waste gas the MPGF will typically burn or substitute a waste gas such as an olefin gas or olefinic gas mixture that will challenge the MPGF to perform at a high level of control in a smokeless capacity.

(i) If a performance test is done, a test report must be submitted to the agency which includes at a minimum: A description of the testing, a protocol describing the test methodology used, associated test method quality assurance/quality control (QA/QC) parameters, raw field and laboratory data sheets, summary data report sheets,

**Appendix A**

<b>Acronym List .....</b>	<b>166</b>
---------------------------	------------

## Acronym List

The following abbreviations or acronyms may be used in this permit:

ACFM .....	actual cubic feet per minute
AMOC .....	alternate means of control
ARP .....	Acid Rain Program
ASTM .....	American Society of Testing and Materials
B/PA .....	Beaumont/Port Arthur (nonattainment area)
CAM .....	Compliance Assurance Monitoring
CD .....	control device
COMS .....	continuous opacity monitoring system
CVS .....	closed-vent system
D/FW .....	Dallas/Fort Worth (nonattainment area)
DR .....	Designated Representative
ELP .....	El Paso (nonattainment area)
EP .....	emission point
EPA .....	U.S. Environmental Protection Agency
EU .....	emission unit
FCAA Amendments .....	Federal Clean Air Act Amendments
FOP .....	federal operating permit
GF .....	grandfathered
gr/100 scf .....	grains per 100 standard cubic feet
HAP .....	hazardous air pollutant
H/G/B .....	Houston/Galveston/Brazoria (nonattainment area)
H <sub>2</sub> S .....	hydrogen sulfide
ID No. ....	identification number
lb/hr .....	pound(s) per hour
MMBtu/hr .....	Million British thermal units per hour
MRRT .....	monitoring, recordkeeping, reporting, and testing
NA .....	nonattainment
N/A .....	not applicable
NADB .....	National Allowance Data Base
NO <sub>x</sub> .....	nitrogen oxides
NSPS .....	New Source Performance Standard (40 CFR Part 60)
NSR .....	New Source Review
ORIS .....	Office of Regulatory Information Systems
Pb .....	lead
PBR .....	Permit By Rule
PM .....	particulate matter
ppmv .....	parts per million by volume
PSD .....	prevention of significant deterioration
RO .....	Responsible Official
SO <sub>2</sub> .....	sulfur dioxide
TCEQ .....	Texas Commission on Environmental Quality
TSP .....	total suspended particulate
TVP .....	true vapor pressure
U.S.C. ....	United States Code
VOC .....	volatile organic compound



## **Appendix B**

<b>Major NSR Summary Table .....</b>	<b>168</b>
--------------------------------------	------------

### Major NSR Summary Table

Permit Number: 100787 and PSDTX1314M1				Issuance Date: July 10, 2015			
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Spec. Cond.	Spec. Cond.	Spec. Cond.
OC4H310	PDH-1 Heater H-310	NO <sub>x</sub>	13.80		6, 10, 11, 12, 16, 19	6, 12, 16, 19, 26, 27	6, 16, 19, 28
		CO	8.95				
		SO <sub>2</sub>	3.27				
		PM	1.15				
		PM <sub>10</sub>	1.15				
		PM <sub>2.5</sub>	1.15				
		VOC (6)	1.56				
		Ethylene	0.63				
		Propylene	0.35				
OC4H320	PDH-1 Heater H-320	NO <sub>x</sub>	13.80		4, 6, 10, 11, 12, 16, 19	4, 6, 12, 16, 19, 26, 27	4, 6, 16, 19, 28
		CO	8.95				
		SO <sub>2</sub>	3.27				
		PM	1.15				
		PM <sub>10</sub>	1.15				
		PM <sub>2.5</sub>	1.15				
		VOC (6)	1.56				
		Ethylene	0.63				
		Propylene	0.35				
OC4H330	PDH-1 Heater H-330	NO <sub>x</sub>	13.80		4, 6, 10, 11, 12, 19	4, 6, 12, 19, 26, 27	4, 6, 19, 28
		CO	8.95				
		SO <sub>2</sub>	3.27				
		PM	1.15				
		PM <sub>10</sub>	1.15				
		PM <sub>2.5</sub>	1.15				
		VOC (6)	1.56				
		Ethylene	0.63				

### Major NSR Summary Table

Permit Number: 100787 and PSDTX1314M1				Issuance Date: July 10, 2015			
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Spec. Cond.	Spec. Cond.	Spec. Cond.
		Propylene	0.35				
OC4H340	PDH-1 Heater H-340	NO <sub>x</sub>	13.80		4, 6, 10, 11, 12, 19	4, 6, 12, 19, 26, 27	4, 6, 19, 28
		CO	8.95				
		SO <sub>2</sub>	3.27				
		PM	1.15				
		PM <sub>10</sub>	1.15				
		PM <sub>2.5</sub>	1.15				
		VOC (6)	1.56				
		Ethylene	0.63				
		Propylene	0.35				
OC4MEH310	Low Firing Mode (MSS)	CO (7)	45.74		19	19	19
OC4MEH320	Low Firing Mode (MSS)	CO (7)	45.74		19	19	19
OC4MEH330	Low Firing Mode (MSS)	CO (7)	45.74		19	19	19
OC4MEH340	Low Firing Mode (MSS)	CO (7)	45.74		19	19	19
OC4MEH310 OC4MEH320 OC4MEH330 OC4MEH340	PDH-1 Heater H-310 PDH-1 Heater H-320 PDH-1 Heater H-330 PDH-1 Heater H-340	NO <sub>x</sub>		152.21			
		CO		118.40			
		SO <sub>2</sub>		1.73			
		PM		15.22			
		PM <sub>10</sub>		15.22			
		PM <sub>2.5</sub>		15.22			
		VOC (6)		20.64			
		Ethylene		8.32			
		Propylene		4.66			

### Major NSR Summary Table

Permit Number: 100787 and PSDTX1314M1					Issuance Date: July 10, 2015		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Spec. Cond.	Spec. Cond.	Spec. Cond.
OC4F9551	Multi-Point Ground Flare FX-955 (Routine)	CO	24.88		4, 6, 20, 21	4, 6, 20, 21, 27	4, 6, 21, 28
		NO <sub>x</sub>	3.63				
		VOC (6)	25.80				
		Ethylene	0.12				
		Propylene	8.36				
		SO <sub>2</sub>	0.38				
OC4F9552	Multi-Point Ground Flare FX-955 (MSS) (8)	CO	1415.64		4, 6, 30, 31, 34	4, 6, 29, 30, 31, 34	
		NO <sub>x</sub>	709.10				
		VOC (6)	1280.27				
		Ethylene	90.08				
		Propylene	435.21				
		SO <sub>2</sub>	40.00				
OC4F956	Merox Elevated Flare FS-956	CO	1.04		4, 6, 20, 21	4, 6, 20, 21, 27	4, 6, 21, 28
		NO <sub>x</sub>	0.12				
		VOC (6)	0.01				
		SO <sub>2</sub>	0.03				
OC4F956	Merox Elevated Flare FS-956 (MSS)	CO	31.42		4, 6, 30, 31, 34	4, 6, 29, 30, 31, 34	
		NO <sub>x</sub>	3.66				
		VOC (6)	0.16				
		Ethylene	0.05				
		Propylene	0.06				
		SO <sub>2</sub>	0.11				
OC4F957	Low Pressure Flare FS-957	CO	0.68		4, 6, 20, 21	4, 6, 20, 21, 27	4, 6, 21, 28
		NO <sub>x</sub>	0.13				
		VOC (6)	0.21				
		Ethylene	0.01				

### Major NSR Summary Table

Permit Number: 100787 and PSDTX1314M1					Issuance Date: July 10, 2015		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Spec. Cond.	Spec. Cond.	Spec. Cond.
OC4F9551 OC4F956 OC4F957 OC4F9552	Flare Annual Source Cap	Propylene	0.15				
		SO <sub>2</sub>	0.03				
		CO	-	85.10			
		NO <sub>x</sub>	-	23.38			
		VOC (6)	-	40.21			
		Ethylene	-	0.36			
OC4CT900	Cooling Tower CT-900	Propylene	-	14.39	22, 23	22, 23, 27	28
		SO <sub>2</sub>	-	0.91			
		VOC (6)	1.88	8.22			
		Ethylene	0.06	0.25			
		Propylene	1.86	8.14			
		PM	0.50	2.20			
OC4FU2	PDH-1 Fugitives	PM <sub>10</sub>	0.27	1.19	4, 6, 7, 8, 9	4, 6, 7, 8, 9, 27	4, 6, 8, 28
		PM <sub>2.5</sub>	0.27	1.19			
		VOC (6)	2.61	11.26			
		Ethylene	0.04	0.16			
		Propylene	0.77	3.35			
		HCl	0.01	0.05			
OC4SV485	CCR Vent Scrubber T-485	CL <sub>2</sub>	0.06	0.27	18, 24	18, 24, 26, 27	18, 24, 28
		CO	1.82	7.95			
		NO <sub>x</sub>	0.15	0.65			
		HCl	0.12	0.52			
		SO <sub>2</sub>	0.21	0.91			
		CL <sub>2</sub>	0.23	0.99			

### Major NSR Summary Table

Permit Number: 100787 and PSDTX1314M1					Issuance Date: July 10, 2015		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Spec. Cond.	Spec. Cond.	Spec. Cond.
OC4DL460	Catalyst Fines Drum Loading, D-460	PM	1.82	0.17			
OC4O470	Catalyst Addition Drum Hopper, D-470	PM	1.82	0.17			
OC4ST122	Storage Tank V-122 Vent	VOC (6)	0.03	0.01		25, 27	28
OC4ST905	HCl Storage Tank V-905	HCl	0.01	0.01		25, 27	28
OC4GE860	Backup Generator DG-860	CO	0.40	0.02	4	4	4
		NO <sub>x</sub>	3.27	0.16			
		SO <sub>2</sub>	0.01	0.01			
		PM	0.09	0.01			
		PM <sub>10</sub>	0.09	0.01			
		PM <sub>2.5</sub>	0.09	0.01			
		VOC	0.11	0.01			
OC4MED470	Catalyst Replacement (MSS)	PM	44.19	9.54	30, 31	29, 30, 31	
OC4MEFP310	H-310 Fuel Purge (MSS)	VOC	0.01	0.01		29	
OC4MEFP320	H-320 Fuel Purge (MSS)	VOC	0.01	0.01		29	
OC4MEFP330	H-330 Fuel Purge (MSS)	VOC	0.01	0.01		29	
OC4MEFP340	H-340 Fuel Purge (MSS)	VOC	0.01	0.01		29	

## Major NSR Summary Table

Permit Number: 100787 and PSDTX1314M1				Issuance Date: July 10, 2015			
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Spec. Cond.	Spec. Cond.	Spec. Cond.
OC4MEFU2	Equipment Opening Fugitives (MSS)	VOC	723.02	0.99	30, 31, 32	29, 30, 31, 32	
	Attachment A Activities (MSS)	VOC	4.71	0.39			

**Footnotes:**

- (1) Emission point identification – either specific equipment designation or emission point number from plot plan.
- (2) Specific point source name. For fugitive sources, use area name or fugitive source name.
- (3) VOC – volatile organic compounds as defined in Title 30 Texas Administrative Code §101.1
  - NO<sub>x</sub> – total oxides of nitrogen
  - SO<sub>2</sub> – sulfur dioxide
  - H<sub>2</sub>S – hydrogen sulfide
  - PM – total particulate matter, suspended in the atmosphere, including PM<sub>10</sub> and PM<sub>2.5</sub>, as represented
  - PM<sub>10</sub> – total particulate matter equal to or less than 10 microns in diameter, including PM<sub>2.5</sub>, as represented
  - PM<sub>2.5</sub> – particulate matter equal to or less than 2.5 microns in diameter
  - CO – carbon monoxide
  - HCl – hydrogen chloride
  - CL<sub>2</sub> – chlorine
- (4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
- (5) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.
- (6) VOC includes speciated ethylene and propylene emissions.
- (7) Annual emission rates for the low firing mode (MSS) are included in the routine heater emission cap of 118.40 tpy CO.
- (8) Startup and shutdown activities for the Multipoint Ground Flare do not occur simultaneously; therefore, the hourly emission rate is based on the maximum emissions from the Startup and Shutdown scenarios. The annual emissions are the sum of the Startup and Shutdown scenario emissions.



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY  
AIR QUALITY PERMIT



*A Permit Is Hereby Issued To*  
**The Dow Chemical Company**  
*Authorizing the Construction and Operation of*  
**Propane Dehydrogenation Unit**  
*Located at Freeport, Brazoria County, Texas*  
Latitude 28° 59' 27" Longitude -95° 24' 26"

Permits: 100787 and PSDTX1314M1

Amendment Date : July 10, 2015

Expiration Date: January 11, 2023

For the Commission

1. **Facilities** covered by this permit shall be constructed and operated as specified in the application for the permit. All representations regarding construction plans and operation procedures contained in the permit application shall be conditions upon which the permit is issued. Variations from these representations shall be unlawful unless the permit holder first makes application to the Texas Commission on Environmental Quality (commission) Executive Director to amend this permit in that regard and such amendment is approved. [Title 30 Texas Administrative Code 116.116 (30 TAC 116.116)]
2. **Voiding of Permit.** A permit or permit amendment is automatically void if the holder fails to begin construction within 18 months of the date of issuance, discontinues construction for more than 18 months prior to completion, or fails to complete construction within a reasonable time. Upon request, the executive director may grant an 18-month extension. Before the extension is granted the permit may be subject to revision based on best available control technology, lowest achievable emission rate, and netting or offsets as applicable. One additional extension of up to 18 months may be granted if the permit holder demonstrates that emissions from the facility will comply with all rules and regulations of the commission, the intent of the Texas Clean Air Act (TCAA), including protection of the public's health and physical property; and (b)(1) the permit holder is a party to litigation not of the permit holder's initiation regarding the issuance of the permit; or (b)(2) the permit holder has spent, or committed to spend, at least 10 percent of the estimated total cost of the project up to a maximum of \$5 million. A permit holder granted an extension under subsection (b)(1) of this section may receive one subsequent extension if the permit holder meets the conditions of subsection (b)(2) of this section. [30 TAC 116.120(a), (b) and (c)]
3. **Construction Progress.** Start of construction, construction interruptions exceeding 45 days, and completion of construction shall be reported to the appropriate regional office of the commission not later than 15 working days after occurrence of the event. [30 TAC 116.115(b)(2)(A)]
4. **Start-up Notification.** The appropriate air program regional office shall be notified prior to the commencement of operations of the facilities authorized by the permit in such a manner that a representative of the commission may be present. The permit holder shall provide a separate notification for the commencement of operations for each unit of phased construction, which may involve a series of units commencing operations at different times. Prior to operation of the facilities authorized by the permit, the permit holder shall identify the source or sources of allowances to be utilized for compliance with Chapter 101, Subchapter H, Division 3 of this title (relating to Mass Emissions Cap and Trade Program). [30 TAC 116.115(b)(2)(B)(iii)]
5. **Sampling Requirements.** If sampling is required, the permit holder shall contact the commission's Office of Compliance and Enforcement prior to sampling to obtain the proper data forms and procedures. All sampling and testing procedures must be approved by the executive director and coordinated with the regional representatives of the commission. The permit holder is also responsible for providing sampling facilities and conducting the sampling operations or contracting with an independent sampling consultant. [30 TAC 116.115(b)(2)(C)]



6. **Equivalency of Methods.** The permit holder must demonstrate or otherwise justify the equivalency of emission control methods, sampling or other emission testing methods, and monitoring methods proposed as alternatives to methods indicated in the conditions of the permit. Alternative methods shall be applied for in writing and must be reviewed and approved by the executive director prior to their use in fulfilling any requirements of the permit. [30 TAC 116.115(b)(2)(D)]
7. **Recordkeeping.** The permit holder shall maintain a copy of the permit along with records containing the information and data sufficient to demonstrate compliance with the permit, including production records and operating hours; keep all required records in a file at the plant site. If, however, the facility normally operates unattended, records shall be maintained at the nearest staffed location within Texas specified in the application; make the records available at the request of personnel from the commission or any air pollution control program having jurisdiction; comply with any additional recordkeeping requirements specified in special conditions attached to the permit; and retain information in the file for at least two years following the date that the information or data is obtained. [30 TAC 116.115(b)(2)(E)]
8. **Maximum Allowable Emission Rates.** The total emissions of air contaminants from any of the sources of emissions must not exceed the values stated on the table attached to the permit entitled "Emission Sources--Maximum Allowable Emission Rates." [30 TAC 116.115(b)(2)(F)]
9. **Maintenance of Emission Control.** The permitted facilities shall not be operated unless all air pollution emission capture and abatement equipment is maintained in good working order and operating properly during normal facility operations. The permit holder shall provide notification for upsets and maintenance in accordance with 30 TAC 101.201, 101.211, and 101.221 of this title (relating to Emissions Event Reporting and Recordkeeping Requirements; Scheduled Maintenance, Startup, and Shutdown Reporting and Recordkeeping Requirements; and Operational Requirements). [30 TAC 116.115(b)(2)(G)]
10. **Compliance with Rules.** Acceptance of a permit by an applicant constitutes an acknowledgment and agreement that the permit holder will comply with all rules, regulations, and orders of the commission issued in conformity with the TCAA and the conditions precedent to the granting of the permit. If more than one state or federal rule or regulation or permit condition is applicable, the most stringent limit or condition shall govern and be the standard by which compliance shall be demonstrated. Acceptance includes consent to the entrance of commission employees and agents into the permitted premises at reasonable times to investigate conditions relating to the emission or concentration of air contaminants, including compliance with the permit. [30 TAC 116.115(b)(2)(H)]
11. **This** permit may not be transferred, assigned, or conveyed by the holder except as provided by rule. [30 TAC 116.110(e)]
12. **There** may be additional special conditions attached to a permit upon issuance or modification of the permit. Such conditions in a permit may be more restrictive than the requirements of Title 30 of the Texas Administrative Code. [30 TAC 116.115(c)]
13. **Emissions** from this facility must not cause or contribute to a condition of "air pollution" as defined in Texas Health and Safety Code (THSC) 382.003(3) or violate THSC 382.085. If the executive director determines that such a condition or violation occurs, the holder shall implement additional abatement measures as necessary to control or prevent the condition or violation.
14. **The** permit holder shall comply with all the requirements of this permit. Emissions that exceed the limits of this permit are not authorized and are violations of this permit.

## **Special Conditions**

Permit Numbers 100787 and PSDTX1314M1

1. This permit authorizes emissions only from those points listed in the attached table entitled "Emission Sources - Maximum Allowable Emission Rates" (MAERT), and the facilities covered by this permit are authorized to emit subject to the emission rate limits on that table and other conditions specified in the special conditions.
2. Non-fugitive emissions from relief valves, safety valves, or rupture discs of gases containing volatile organic compounds (VOC) at a concentration of greater than 1 percent are not authorized by this permit unless authorized on the MAERT. Any releases directly to the atmosphere from relief valves, safety valves, or rupture discs of gases containing VOC at a concentration greater than 1 weight percent are not consistent with good practice for minimizing emissions.

## **Production Limit**

3. The average annual propylene and by-product production rate shall not exceed the pounds per hour levels indicated on the confidential Table 2 Material Balance submittal of the September 15, 2014 amendment application. Monthly records of the propylene and by-products production rate shall be maintained on-site for a period of five years and made available to representatives of the Texas Commission for Environmental Quality (TCEQ) upon request. **(07/15)**

## **Federal Program Applicability**

4. This facility shall comply with all applicable requirements of the U.S. Environmental Protection Agency (EPA) regulations on New Source Performance Standards (NSPS) in Title 40 Code of Federal Regulations (40 CFR) Part 60, promulgated for: **(07/15)**
  - A. General Provisions in Subpart A
  - B. Industrial, Commercial, Institutional Steam Generating Units in Subpart Dc
  - C. Storage Tanks in Subpart Kb
  - D. VOC Equipment Leaks in Subpart VVa
  - E. SOCMi Distillation Operations in Subpart NNN
  - F. SOCMi Reactor Processes in Subpart RRR
  - G. SOCMi Wastewater Subpart in Subpart YYY

5. This facility shall comply with all applicable requirements of EPA regulations on National Emission Standards for Hazardous Air Pollutants (NESHAPS) in 40 CFR Part 61, promulgated for: **(07/15)**
  - A. General Provisions in Subpart A
  - B. Benzene Equipment Leaks in Subpart J, and
  - C. Hazardous Air Pollutant (HAP) Equipment Leaks in Subpart V.
6. This facility shall comply with all applicable requirements of the EPA regulations on National Emission Standards for Hazardous Air Pollutants (NESHAP) for Source Categories in 40 CFR Part 63, promulgated for: **(07/15)**
  - A. General Provisions in Subpart A
  - B. SOCMH Hazardous Organic NESHAP (HON) General in Subpart F
  - C. SOCMH HON Vents, Storage, Transfer & Wastewater in Subpart G
  - D. SOCMH HON Fugitives in Subpart H
  - E. NESHAP for Closed Vent Systems, Control Devices, Recovery Devices & Routing to a Fuel Gas System or Process in Subpart SS
  - F. Organic Liquid Distribution (OLD) Maximum Achievable Control Technology (MACT) Standards in Subpart EEEE
  - G. Miscellaneous Organic NESHAP (MON) in Subpart FFFF
  - H. Site Remediation MACT in Subpart GGGGG

### **Leak Detection and Repair Programs**

7. Piping, Valves, Connectors, Pumps, Compressors, and Flanges in Chlorine (Cl<sub>2</sub>) Service
  - A. Audio, olfactory and visual checks for the hydrogen chloride (HCl) and Cl<sub>2</sub> leaks within the operating area shall be made twice per shift.
  - B. Immediately, but no later than one hour upon detection of a leak, plant personnel shall take one or more of the following actions:
    - (1) Isolate the leak.
    - (2) Commence repair or replacement of the leaking component.
    - (3) Use a leak collection/containment system to prevent the leak until repair or replacement can be made if immediate repair is not possible.

Date and time of each inspection shall be noted in the operator's log or equivalent. Records shall be maintained at the plant site of all repairs and replacements made due to leaks. These records shall be made available to representatives of the Texas Commission on Environmental Quality (TCEQ) upon request.

8. Piping, Valves, Connectors, Pumps, Agitators and Compressors in VOC Service - 28 MID.

Except as may be provided for in the special conditions of this permit, the following requirements apply to the above-referenced equipment.

- A. The requirements of paragraphs F and G shall not apply (1) where the VOC has an aggregate partial pressure or vapor pressure of less than 0.044 pound per square inch, absolute (psia) at 68°F or (2) operating pressure is at least five kilopascals (0.725 pound psi) below ambient pressure. Equipment excluded from this condition shall be identified in a list or by one of the methods described below to be made available upon request.

The exempted components may be identified by one or more of the following methods:

- (1) piping and instrumentation diagram (PID);
  - (2) a written or electronic database or electronic file;
  - (3) color coding;
  - (4) a form of weatherproof identification; or
  - (5) designation of exempted process unit boundaries.
- B. Construction of new and reworked piping, valves, pump systems, agitators, and compressor systems shall conform to applicable American National Standards Institute (ANSI), American Petroleum Institute (API), American Society of Mechanical Engineers (ASME), or equivalent codes.
- C. New and reworked underground process pipelines shall contain no buried valves such that fugitive emission monitoring is rendered impractical. New and reworked buried connectors shall be welded.
- D. To the extent that good engineering practice will permit, new and reworked valves and piping connections shall be so located to be reasonably accessible for leak checking during plant operation. Difficult-to-monitor and unsafe-to-monitor valves, as defined by Title 30 Texas Administrative Code Chapter 115 (30 TAC Chapter 115), shall be identified in a list to be made readily available upon request. The difficult-to-monitor and unsafe-to-monitor valves may be identified by one or more of the methods described in subparagraph A above.
- E. New and reworked piping connections shall be welded or flanged. Screwed connections are permissible only on piping smaller than two-inch diameter. Gas or hydraulic testing of the new and reworked piping connections at no less than operating pressure shall be performed prior to returning the components to service

or they shall be monitored for leaks using an approved gas analyzer within 15 days of the components being returned to service. Adjustments shall be made as necessary to obtain leak-free performance. Connectors shall be inspected by visual, audible, and/or olfactory means at least weekly by operating personnel walk-through.

Each open-ended valve or line shall be equipped with an appropriately sized cap, blind flange, plug, or a second valve to seal the line. Except during sampling, both valves shall be closed. If the isolation of equipment for hot work or the removal of a component for repair or replacement results in an open ended line or valve, it is exempt from the requirement to install a cap, blind flange, plug, or second valve for 72 hours. If the repair or replacement is not completed within 72 hours, the permit holder must complete either of the following actions within that time period:

- (1) a cap, blind flange, plug, or second valve must be installed on the line or valve; or
- (2) the open-ended line or valve shall be monitored once for leaks above background for a plant or unit turnaround lasting up to 45 days with an approved gas analyzer and the results recorded. For all other situations, the open-ended valve or line shall be monitored once by the end of the 72 hours period following the creation of the open ended line and monthly thereafter with an approved gas analyzer and the results recorded. For turnarounds and all other situations, leaks are indicated by readings of 500 ppmv and must be repaired within 24 hours or a cap, blind flange, plug, or second valve must be installed on the line or valve.

- F. Accessible valves shall be monitored by leak checking for fugitive emissions at least quarterly using an approved gas analyzer with a directed maintenance program. Sealless/leakless valves (including, but not limited to, welded bonnet bellows and diaphragm valves) and relief valves equipped with a rupture disc upstream or venting to a control device are not required to be monitored. For valves equipped with rupture discs, a pressure-sensing device shall be installed between the relief valve and rupture disc to monitor disc integrity. All leaking discs shall be replaced at the earliest opportunity but no later than the next process shutdown.

A check of the reading of the pressure-sensing device to verify disc integrity shall be performed at least quarterly and recorded in the unit log or equivalent. Pressure-sensing devices that are continuously monitored with alarms are exempt from recordkeeping requirements specified in this paragraph.

An approved gas analyzer shall conform to requirements listed in Method 21 of 40 CFR part 60, appendix A. The gas analyzer shall be calibrated with methane. In addition, the response factor of the instrument for a specific VOC of interest shall be determined and meet the requirements of Section 8 of Method 21. If a mixture of VOCs is being monitored, the response factor shall be calculated for the average composition of the process fluid. A calculated average is not required when all of the compounds in the mixture have a response factor less than 10 using methane. If a response factor less than 10 cannot be achieved using methane, then the instrument may be calibrated with one of the VOC to be measured or any other VOC so long as

the instrument has a response factor of less than 10 for each of the VOC to be measured.

A directed maintenance program shall consist of the repair and maintenance of components assisted simultaneously by the use of an approved gas analyzer such that a minimum concentration of leaking VOC is obtained for each component being maintained. A first attempt to repair the leak must be made within 5 days. Records of the first attempt to repair shall be maintained. Replaced components shall be re-monitored within 15 days of being placed back into VOC service.

- G. All new and replacement pumps, compressors, and agitator seals shall be equipped with a shaft sealing system that prevents or detects emissions of VOC from the seal. These seal systems need not be monitored and may include (but are not limited to) dual pump seals with barrier fluid at higher pressure than process pressure, seals degassing to vent control systems kept in good working order, or seals equipped with an automatic seal failure detection and alarm system. Submerged pumps or sealless pumps (including, but not limited to, diaphragm, canned, or magnetic-driven pumps) may be used to satisfy the requirements of this condition and need not be monitored.

All other pump, compressor, and agitator seals shall be monitored with an approved gas analyzer at least quarterly.

- H. Damaged or leaking valves, connectors, compressor seals, pump seals, and agitator seals found to be emitting VOC in excess of 500 parts per million by volume (ppmv) or found by visual inspection to be leaking (e.g., dripping process fluids) shall be tagged and replaced or repaired. A leaking component shall be repaired as soon as practicable, but no later than 15 days after the leak is found. If the repair of a component would require a unit shutdown that would create more emissions than the repair would eliminate, the repair may be delayed until the next scheduled shutdown. All leaking components which cannot be repaired until a scheduled shutdown shall be identified for such repair by tagging. A listing of all components that qualify for delay of repair shall be maintained on a delay of repair list. The cumulative daily emissions from all components on the delay of repair list shall be estimated by multiplying by 24 the mass emission rate for each component calculated in accordance with the instructions in 30 TAC § 115.782 (c)(1)(B)(i)(II). The calculations of the cumulative daily emissions from all components on the delay of repair list shall be updated within ten days of the date the latest leaking component is added to the delay of repair list. When the cumulative daily emission rate of all components on the delay of repair list times the number of days until the next scheduled unit shutdown is equal to or exceeds the total emissions from a unit shutdown as calculated in accordance with 30 TAC § 115.782(c)(1)(B)(i)(I), the Texas Commission on Environmental Quality (TCEQ) Regional Manager and any local programs shall be notified and may require early unit shutdown or other appropriate action based on the number and severity of tagged leaks awaiting shutdown. This notification shall be made within 15 days of making this determination.

- I. In lieu of the monitoring frequency specified in paragraph F, valves in gas and light liquid service may be monitored on a semiannual basis if the percent of valves leaking for two consecutive quarterly monitoring period is less than 0.5 percent.
- Valves in gas and light liquid service may be monitored on an annual basis if the percent of valves leaking for two consecutive semiannual monitoring periods is less than 0.5 percent.
- If the percent of valves leaking for any semiannual or annual monitoring period is 0.5 percent or greater, the facility shall revert to quarterly monitoring until the facility again qualifies for the alternative monitoring schedules previously outlined in this paragraph.
- J. The percent of valves leaking used in paragraph I shall be determined using the following formula:
- $$(V_1 + V_s) \times 100 / V_t = V_p$$
- Where:
- $V_1$  = the number of valves found leaking by the end of the monitoring period, either by Method 21 or sight, sound, and smell.
- $V_s$  = the number of valves for which repair has been delayed and are listed on the facility shutdown log.
- $V_t$  = the total number of valves in the facility subject to the monitoring requirements, as of the last day of the monitoring period, not including nonaccessible and unsafe-to-monitor valves.
- $V_p$  = the percentage of leaking valves for the monitoring period.
- K. Records of repairs shall include date of repairs, repair results, justification for delay of repairs, and corrective actions taken for all components. Records of instrument monitoring shall indicate dates and times, test methods, and instrument readings. The instrument monitoring record shall include the time that monitoring took place for no less than 95 percent of the instrument readings recorded. Records of physical inspections shall be noted in the operator's log or equivalent.
- L. Compliance with the requirements of this condition does not assure compliance with requirements of 30 TAC Chapter 115, an applicable New Source Performance Standard (NSPS), or an applicable National Emission Standard for Hazardous Air Pollutants (NESHAPS) and does not constitute approval of alternative standards for these regulations.

9. Connector Monitoring – 28 CNTQ

In addition to the weekly physical inspection required by Item E of Special Condition 8, all accessible connectors in gas/vapor and light liquid service shall be monitored quarterly with an approved gas analyzer in accordance with Items F through J of Special Condition No. 8. **(07/15)**

- A. Connectors may be monitored on a semiannual basis if the percent of connectors leaking for two consecutive quarterly monitoring periods is less than 0.5 percent.
- Connectors may be monitored on an annual basis if the percent of connectors leaking for two consecutive semiannual monitoring periods is less than 0.5 percent.
- If the percent of connectors leaking for any semiannual or annual monitoring period is 0.5 percent or greater, the facility shall revert to quarterly monitoring until the facility again qualifies for the alternative monitoring schedules previously outlined in this paragraph.
- B. The percent of connectors leaking used in paragraph A shall be determined using the following formula:
- $$(Cl + Cs) \times 100 / Ct = Cp$$
- Where:
- Cl = the number of connectors found leaking by the end of the monitoring period, either by Method 21 or sight, sound and smell.
- Cs = the number of connectors for which repair has been delayed and are listed on the facility shutdown log.
- Ct = the total number of connectors in the facility subject to the monitoring requirements, as of the last day of the monitoring period, not including nonaccessible and unsafe-to-monitor connectors.
- Cp = the percentage of leaking connectors for the monitoring period.

## Heaters

10. Fuel for the four heaters (EPNs OC4H310, OC4H320, OC4H330 and OC4H340) shall be limited to pipeline-quality, sweet natural gas or other gaseous fuels containing no more than 5.0 grains total sulfur per 100 dscf (hourly basis), and 0.2 grain total sulfur per 100 dscf (annual basis).

The natural gas and other gaseous fuels (fuel gas) shall be sampled every six months to determine total sulfur and net heating value. Test results from the fuel supplier may be used to satisfy this requirement.

Firing of any other fuel will require authorization from the TCEQ Executive Director through a permit by rule claim or a permit amendment.

11. The permit holder shall install and operate a fuel flow meter to measure the gaseous fuel usage for each heater. The monitored data shall be reduced to an hourly average flow rate at least once every day, using a minimum of four equally spaced data points from each one-hour period. Each monitoring device shall be calibrated using an electronic check or other method approved by the Texas Commission on Environmental Quality (TCEQ) at a frequency in accordance with the manufacturer's specifications or at least annually, whichever is more frequent, and shall be accurate to within 5 percent. In lieu of



monitoring fuel flow, the permit holder may monitor stack exhaust flow using the flow monitoring specifications of 40 CFR Part 60, Appendix B, Performance Specification 6 or 40 CFR Part 75, Appendix A. Fuel for pilot gas usage is not required to be measured and monitored.

The monitor shall operate as required at least 95 percent of the time when the combustion device is operational, averaged over a rolling 12 month period. Loss of valid data due to periods of monitor break down, out-of-control operation (producing inaccurate data), repair, maintenance, or calibration may be exempted provided it does not exceed 5 percent of the time (in minutes) that the meter operated over the previous rolling 12-month period.

12. The maximum hourly average firing rate from the heaters; PDH-1 Heater H-310 (EPN OC4H310); PDH-1 Heater H-320 (EPN OC4H320); PDH-1 Heater H-330 (EPN OC4H330) and PDH-1 Heater H-340 (EPN OC4H340) shall not exceed 230 Million British Thermal Units/hr (MMBtu/hr) (HHV). Average annual heat input for all heaters shall not exceed 695 MMBtu/hr.

Heat input for each combustion unit shall be monitored and recorded. Monthly records documenting each hourly average shall be kept at the plant site demonstrating compliance with the maximum hourly average firing rates for each unit and these records shall be kept on a five year rolling basis and shall be made available to the representatives of TCEQ, EPA or any local programs having jurisdiction. **(07/15)**

13. Each of the four heaters (EPNs OC4H310, OC4H320, OC4H330 and OC4H340) shall not exceed an hourly average of 0.06 lb/MMBtu (HHV) and an annual average of 0.05 lb/MMBtu (HHV) for nitrogen oxides (NO<sub>x</sub>), and 50 ppmvd carbon monoxide (CO) on an hourly basis corrected to 3 percent O<sub>2</sub>. Compliance with these factors shall be demonstrated through the initial determination of compliance testing in Special Condition No. 15 and 16 and continuous determination of compliance testing in Special Condition No. 19.
14. Opacity of emissions from any one stack authorized by this permit shall not exceed 5 percent averaged over a six-minute period. During periods of startup, shutdown, or maintenance, the opacity shall not exceed 15 percent over a six minute period. Opacity shall be determined by the EPA Reference Method 9 during the initial determination of compliance stack sampling.

#### **Initial Determination Of Compliance of Heaters**

15. Sampling ports and platforms shall be incorporated into the design of the exhaust stack from the PDH-1 Heater H-310 (EPN OC4H310) and the PDH-1 Heater H-320 (EPN OC4H320) according to the specifications set forth in the attachment entitled "Chapter 2, Stack Sampling Facilities". Alternate sampling facility designs may be submitted for approval by the TCEQ Houston Regional Director.

16. The holder of this permit shall perform stack sampling and other testing as required to establish the actual pattern and quantities of air contaminants being emitted into the atmosphere from the EPNs OC4H310 and OC4H320 to demonstrate compliance with the MAERT. The permit holder is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at his expense. Sampling shall be conducted in accordance with the appropriate procedures of the TCEQ Sampling Procedures Manual and in accordance with the appropriate EPA Reference Methods.  
**(07/15)**

Requests to waive testing for any pollutant specified in this condition shall be submitted to the TCEQ Office of Air, Air Permits Division. Test waivers and alternate/equivalent procedure proposals for Title 40 Code of Federal Regulation part 60 (40 CFR Part 60) testing which must have EPA approval shall be submitted to the TCEQ Regional Director.

- A. The TCEQ Houston Regional Office shall be contacted as soon as testing is scheduled but not less than 45 days prior to sampling. The notice shall include:

- (1) Proposed date for pretest meeting
- (2) Date sampling will occur
- (3) Name of firm conducting sampling
- (4) Type of sampling equipment to be used
- (5) Method or procedure to be used in sampling
- (6) Description of any proposed deviation from the sampling procedures specified in this permit or TCEQ/EPA sampling procedures
- (7) Procedure/parameters to be used to determine worst case emissions during the sampling period.

The purpose of the pretest meeting is to review the necessary sampling and testing procedures, to provide the proper data forms for recording pertinent data, and to review the format procedures for submitting the test reports. The TCEQ Regional Director must approve any deviation from specified sampling procedures.

- B. Air contaminants and diluents from the EPNs OC4H-310 and OC4H-320 to be tested for include (but are not limited to) NO<sub>x</sub>, CO, VOC, SO<sub>2</sub>, particulate matter, opacity and O<sub>2</sub>. Air contaminant testing for CO and NO<sub>x</sub> may be concurrent with the initial relative accuracy test audit (RATA) for the continuous emission monitoring system (CEMS) on each heater.
- C. Sampling shall occur within 60 days after achieving the maximum operating rate, but no later than 180 days after initial start-up of the facilities and at such other times as may be required by the TCEQ Executive Director. Requests for additional time to perform sampling shall be submitted to the appropriate regional office.

- D. The heaters being sampled shall operate at the maximum fuel firing rate in MMBtu represented in the application during stack emission testing. The conditions/parameters and any other primary operating parameters that affect the emission rate shall be monitored and recorded during the stack test. Any additional parameters shall be determined at the pretest meeting and shall be stated in the sampling report. Permit conditions and parameter limits may be waived during stack testing performed under this condition if the proposed condition/parameter range is identified in the test notice specified in paragraph A and accepted by the TCEQ Regional Office. Permit allowable emissions and emission control requirements are not waived and still apply during stack testing periods.

During subsequent operations, if the 12-month rolling average CO concentration for any heater is more than 5 ppmvd at 3% O<sub>2</sub> greater than that recorded during the heater testing for PM and VOC, stack sampling shall be performed at the new operating conditions within 120 days. This sampling may be waived by the TCEQ Air Section Manager for the Region.

- E. Copies of the final sampling report shall be forwarded to the offices below within 60 days after sampling is completed. Sampling reports shall comply with the attached provisions entitled "Chapter 14, Contents of Sampling Reports" of the TCEQ Sampling Procedures Manual. The reports shall be distributed as follows:

One copy to the TCEQ Houston Regional Office

One copy to each local air pollution control program

**Initial Determination of Compliance for CCR Vent Scrubber T-485 (EPN OC4SV485)**

17. Sampling ports and platforms shall be incorporated into the design of the exhaust stack from the CCR Vent Scrubber T-485 (EPN OC4SV485) according to the specifications set forth in the attachment entitled "Chapter 2, Stack Sampling Facilities". Alternate sampling facility designs may be submitted for approval by the TCEQ Houston Regional Director.
18. The holder of this permit shall perform stack sampling and other testing as required to establish the actual pattern and quantities of air contaminants being emitted into the atmosphere from the EPN OC4SV485 to demonstrate compliance with the MAERT. The permit holder is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at his expense. Sampling shall be conducted in accordance with the appropriate procedures of the TCEQ Sampling Procedures Manual and in accordance with the appropriate EPA Reference Methods.

Requests to waive testing for any pollutant specified in this condition shall be submitted to the TCEQ Office of Air, Air Permits Division. Test waivers and alternate/equivalent procedure proposals for Title 40 Code of Federal Regulation part 60 (40 CFR Part 60) testing which must have EPA approval shall be submitted to the TCEQ Regional Director.

- A. The TCEQ Houston Regional Office shall be contacted as soon as testing is scheduled but not less than 45 days prior to sampling. The notice shall include:
- (1) Proposed date for pretest meeting
  - (2) Date sampling will occur
  - (3) Name of firm conducting sampling
  - (4) Type of sampling equipment to be used
  - (5) Method or procedure to be used in sampling
  - (6) Description of any proposed deviation from the sampling procedures specified in this permit or TCEQ/EPA sampling procedures
  - (7) Procedure/parameters to be used to determine worst case emissions during the sampling period.

The purpose of the pretest meeting is to review the necessary sampling and testing procedures, to provide the proper data forms for recording pertinent data, and to review the format procedures for submitting the test reports. The TCEQ Regional Director must approve any deviation from specified sampling procedures.

- B. Air contaminants and diluents from the EPN OC4SV485 Scrubber to be tested for include (but are not limited to) HCl, Cl<sub>2</sub> and SO<sub>2</sub>.
- C. Sampling shall occur within 60 days after achieving the maximum operating rate, but no later than 180 days after initial start-up of the facilities and at such other times as may be required by the TCEQ Executive Director. Requests for additional time to perform sampling shall be submitted to the appropriate regional office.
- D. The scrubber testing shall be conducted while the plant is operating at maximum production rates. The primary operating parameters that enable determination of maximum vent flow rate shall be monitored and recorded during the stack test. These parameters shall be determined at the pretest meeting and shall be stated in the sampling report.

During subsequent operations, if the production rate is greater than 10% of that recorded during the test period, stack sampling shall be performed at the new operating conditions within 120 days. This sampling may be waived by the TCEQ Air Section Manager for the Region.

- E. Copies of the final sampling report shall be forwarded to the offices below within 60 days after sampling is completed. Sampling reports shall comply with the attached provisions entitled "Chapter 14, Contents of Sampling Reports" of the TCEQ Sampling Procedures Manual. The reports shall be distributed as follows:

One copy to the TCEQ Houston Regional Office

One copy to each local air pollution control program

**Continuous Determination of Compliance (EPNs OC4H310, OC4H320, OC4H330 and OC4H340)**

19. The holder of this permit shall install, calibrate, maintain, and operate a continuous emission monitoring system (CEMS) to measure and record the concentrations of NO<sub>x</sub>, CO, and diluent gases (O<sub>2</sub> or carbon dioxide [CO<sub>2</sub>]) from the PDH-1 Heater H-310 (EPN OC4H310), PDH-1 Heater H-320 (EPN OC4H320), PDH-1 Heater H-330 (EPN OC4H330), and the PDH-1 Heater 340 (EPN OC4H340). The CEMS data at these EPNs shall be used to determine continuous compliance with the NO<sub>x</sub> and CO emission limitations in Special Condition No. 13 and the attached MAERT.

- A. The CEMS shall meet the design and performance specifications, pass the field tests, and meet the installation requirements and the data analysis and reporting requirements specified in the applicable Performance Specification Nos. 1 through 9, 40 CFR Part 60, Appendix B. If there are no applicable performance specifications in 40 CFR Part 60, Appendix B, contact the Office of Air, Air Permits Division for requirements to be met.
- B. Each monitor shall be quality-assured at least quarterly using Cylinder Gas Audits (CGA) in accordance with 40CFR Part 60, Appendix F, Procedure 1, Section 5.1.2, with the following exception; a relative accuracy test audit (RATA) is not required once every four quarters (i.e., four successive quarterly CGA may be conducted). An equivalent quality-assurance method approved by the TCEQ may also be used. Successive quarterly audits shall occur no closer than two months.

All CGA exceedances of +/- 15 percent accuracy indicate that the CEMS is out of control.

- C. The monitoring data shall be reduced to hourly average concentrations at least once every day, using a minimum of four equally-spaced data points from each one hour period. The individual average concentrations shall be reduced to units of the permit allowable emission rate in pound per hour at least once every week as follows:  
  
The measured average concentration from the CEMS shall be used with EPA Method 19 to determine the hourly emission rate. The NO<sub>x</sub> emissions shall be in the units of lb/MMBtu. The CO emissions shall be in parts per million by volume.
- D. All monitoring data and quality-assurance data shall be maintained by the source. The data from the CEMS may, at the discretion of the TCEQ, be used to determine compliance with the conditions of this permit.
- E. The appropriate TCEQ Regional Office shall be notified at least 30 days prior to any required RATA in order to provide them the opportunity to observe the testing.
- F. Quality-assured (or valid) data must be generated when the heater is operating except during the performance of a daily zero and span check. Loss of valid data due to periods of monitor break down, out-of-control operation (producing inaccurate data), repair, maintenance, or calibration may be exempted provided it does not exceed 5 percent of time (in minutes) that the heater operated over the previous rolling 12-month period. The measurements missed shall be estimated using

engineering judgment and the methods used recorded. Options to increase system reliability to an acceptable value, including a redundant CEMS, may be required by the TCEQ Regional Manager.

**Flares (EPNs OC4F9551, OC4F956 and OC4F957)**

**20. The flares shall be designed, and operated in accordance with the following requirements: (07/15)**

- A. The flares shall be designed such that the combined assist natural gas and waste stream to the flare meets the 40 CFR § 60.18 specifications of minimum heating value and maximum tip velocity under normal, maintenance, start-up and shutdown (MSS) flow conditions with the exception of Multipoint Ground Flare (EPN OC4F9552) used during MSS operations. Requirements of the Alternative Method of Control (AMOC) issued by TCEQ for Permit No. 100787 (Project No. 197013) and Alternate Means of Emission Limitation (AMEL) issued by EPA shall apply during the use of the Multipoint Ground Flare for control of MSS emissions from the facility.

The heating value and velocity requirements shall be satisfied during operations authorized by this permit. Flare testing per 40 CFR § 60.18(f) may be requested by the appropriate TCEQ Regional Office to demonstrate compliance with these requirements.

- B. The flare shall be operated with a flame present at all times and/or have a constant pilot flame. The pilot flame shall be continuously monitored by a thermocouple or an infrared monitor. The time, date, and duration of any loss of pilot flame shall be recorded. Each monitoring device shall be accurate to, and shall be calibrated at a frequency in accordance with, the manufacturer's specifications or equivalent.
- C. The flare shall be operated with no visible emissions except periods not to exceed a total of five minutes during any two consecutive hours.
- D. The flare shall comply with the applicable provisions for Highly-Reactive VOC found in Title 30 Texas Administrative Code Chapter 115 (30 TAC Chapter 115), Subchapter H, Division 1: Vent Gas Control, as required by 30 TAC Chapter 115, Subchapter H, effective December 23, 2004.
- E. The permit holder shall install a continuous flow monitor and composition analyzer that provide a record of the vent stream flow and composition (total VOC or Btu content) to the flare. The flow monitor sensor and analyzer sample points shall be installed in the vent stream as near as possible to the flare inlet such that the total vent stream to the flare is measured and analyzed. Readings shall be taken at least once every 15 minutes and the average hourly values of the flow and composition shall be recorded each hour.

The monitors shall be calibrated on an annual basis to meet the following accuracy specifications: the flow monitor shall be  $\pm 5.0$  percent, temperature monitor shall be  $\pm 2.0$  percent at absolute temperature, and pressure monitor shall be  $\pm 5.0$  mm Hg;

Calibration of the analyzer shall follow the procedures and requirements of Section 10.0 of 40 CFR Part 60, Appendix B, Performance Specification 9, as amended through October 17, 2000 (65 FR 61744), except that the multi-point calibration procedure in Section 10.1 of Performance Specification 9 shall be performed at least once every calendar quarter instead of once every month, and the mid-level calibration check procedure in Section 10.2 of Performance Specification 9 shall be performed at least once every calendar week instead of once every 24 hours. The calibration gases used for calibration procedures shall be in accordance with Section 7.1 of Performance Specification 9. Net heating value of the gas combusted in the flare shall be calculated according to the equation given in 40 CFR § 60.18(f)(3) as amended through October 17, 2000, (65 FR 61744).

If a calorimeter is used, it shall be calibrated, installed, operated, and maintained, in accordance with manufacturer recommendations, to continuously measure and record the net heating value of the gas sent to the flare, in British thermal units/standard cubic foot of the gas.

The flow monitors and composition analyzers shall operate as required by this section at least 95% of the time when the flare is operational, averaged over a rolling 12 month period. Flared gas net heating value and actual exit velocity determined in accordance with 40 CFR § 60.18(f)(4) shall be recorded at least once every 15 minutes. Hourly mass emission rates shall be determined and recorded using the above readings and the emission factors used in the permit application, PI-1 dated September 15, 2014.

21. The following requirements apply to the vent gas capture systems for the flare.

- A. Either conduct a once a month visual, audible, and/or olfactory inspection of the capture system to verify there are no leaking components in the capture system; or verify the capture system is leak-free by inspecting in accordance with 40 CFR Part 60, Appendix A, Test Method 21 once a year. Leaks shall be indicated by an instrument reading greater than or equal to 500 ppmv above background.

- B. The control device shall not have a bypass.

or

If there is a bypass for the control device, comply with either of the following requirements:

- (1) Install a flow indicator that records and verifies zero flow at least once every 15 minutes immediately downstream of each valve that if opened would allow a vent stream to bypass the control device and be emitted, either directly or indirectly, to the atmosphere; or
- (2) Once a month, inspect the valves, verifying the position of the valves and the condition of the car seals that prevent flow out the bypass.

These requirements do not apply to high point vent and low point drain valves. A deviation shall be reported if the monitoring or inspections indicate bypass of the control device when required to be in service per this permit.

- C. If any of the above inspections is not satisfactory, the permit holder shall promptly take necessary corrective action. Records shall be maintained documenting the performance and results of the inspections required above.

### **Cooling Tower**

- 22. The VOC associated with cooling tower CT-900 and heat exchange system (EPN OC4CT900) water shall be monitored monthly with an air stripping system meeting the requirements of the TCEQ Sampling Procedures Manual, Appendix P (dated January 2003 or a later edition) or an approved equivalent sampling method. **(07/15)**
  - A. The results of the monitoring, cooling water flow rate, and maintenance activities on the cooling water system shall be recorded.
  - B. The monitoring results and cooling water hourly mass flow rate shall be used to determine cooling tower hourly VOC emissions. The rolling 12 month cooling water emission rate shall be recorded on a monthly basis and be determined by summing the VOC emissions between VOC monitoring periods over the rolling 12 month period. The emissions between VOC monitoring periods shall be obtained by multiplying the total cooling water mass flow between cooling water monitoring periods by the higher of the 2 VOC monitored results.
  - C. The cooling tower water and heat exchange system shall be continuously monitored for the Highly Reactive Volatile Organic Compound (HRVOC) per requirements of 30 TAC Chapter 115, Subchapter H.
  - D. HRVOC hourly emissions shall be calculated in accordance with the requirements of 30 TAC Chapter 115, Subchapter H. The rolling 12 month emissions shall be determined from the sum of the hourly emissions.
  - E. The results of the HRVOC concentration monitoring, cooling water flow rate, and maintenance activities on the cooling water system shall be recorded. The monitoring results and cooling water hourly mass flow rate shall be used to determine cooling tower hourly HRVOC emissions.
  - F. VOC hourly emissions shall be calculated using the higher of the measured VOC cooling water concentration or the total HRVOC concentration and the hourly cooling water circulation rate per the calculation method in the permit application. The rolling 12 month emissions shall be determined from the sum of the hourly emissions.
- 23. The cooling tower CT-900 and heat exchange system (EPN OC4CT900) shall be operated and monitored in accordance with the following: **(07/15)**
  - A. Each cooling tower shall be equipped with drift eliminators having manufacturer's design assurance of 0.0005% drift or less. Drift eliminators shall be maintained and inspected at least annually. The permit holder shall maintain records of all inspections and repairs.



- B. Total dissolved solids (TDS) shall not exceed 2680 parts per million by weight (ppmw). Dissolved solids in the cooling water drift are considered to be emitted as PM, PM<sub>10</sub>, and PM<sub>2.5</sub> as represented in the permit application calculations.
- C. Cooling tower shall be analyzed for particulate emissions using one of the following methods:
  - (1) Cooling water shall be sampled at least once per day for total dissolved solids (TDS); or
  - (2) TDS monitoring may be reduced to weekly if conductivity is monitored daily and TDS is calculated using a ratio of TDS-to-conductivity (in ppmw per  $\mu\text{mho}/\text{cm}$  or ppmw/siemens). The ratio of TDS-to-conductivity shall be determined by concurrently monitoring TDS and conductivity on a weekly basis. The permit holder may use the average of two consecutive TDS-to-conductivity ratios to calculate daily TDS; or
  - (3) TDS monitoring may be reduced to quarterly if conductivity is monitored daily and TDS is calculated using a correlation factor established for each cooling tower. The correlation factor shall be the average of nine consecutive weekly TDS-to-conductivity ratios determined using C(2) above provided the highest ratio is not more than 10% larger than the smallest ratio.
  - (4) The permit holder shall validate the TDS-to-conductivity correlation factor once each calendar quarter. If the ratio of concurrently sampled TDS and conductivity is more than 10% higher or lower than the established factor, the permit holder shall increase TDS monitoring to weekly until a new correlation factor can be established.
- D. Cooling water sampling shall be representative of the water being cooled in the tower (cooling tower feed water) and shall be conducted using approved methods.
  - (1) The analysis method for TDS shall be EPA Method 160.1, ASTM D5907, or SM 2540 C [SM - 19th edition of Standard Methods for Examination of Water]. Water samples should be capped upon collection, and transferred to a laboratory area for analysis.
  - (2) The analysis method for conductivity shall be either ASTM D1125-95A (field or routine laboratory testing) or ASTM D1125-95B (continuous monitor). The analysis may be conducted at the sample site or with a calibrated process conductivity meter. If a conductivity meter is used, it shall be calibrated at least annually. Documentation of the method and any associated calibration records shall be maintained.
  - (3) Alternate sampling and analysis methods may be used to comply with D(1) and D(2) with written approval from the TCEQ Regional Director.
  - (4) Records of all instrument calibrations and test results and process measurements used for the emission calculations shall be retained.
- E. PM, PM<sub>10</sub> and PM<sub>2.5</sub> hourly emissions shall be calculated using the measured TDS or the ratio or correlation of TDS to conductivity measurements, and the hourly cooling

water circulation rate with the design drift rate and  $PM_{10}$  and  $PM_{2.5}$  ratios per the calculation method in the permit application. Alternately, the design maximum circulation rate may be used for all calculations. The rolling 12 month emissions shall be determined from the sum of the hourly emissions.

## **Scrubber**

24. CCR process vents shall be directed to Vent Scrubber T-485 (EPN OC4SV485).
- A. The scrubber shall maintain an exhaust concentration of less than 10 ppmv on an hourly average basis at the scrubber outlet for hydrogen chloride, chlorine and sulfur dioxide.
  - B. The permit holder shall install, calibrate, and maintain a continuous emission monitoring system (CEMS) to measure and record the in-stack concentration of the chlorine, hydrogen chloride and sulfur dioxide from the Scrubber T-485.
    - (1) The monitoring data shall be reduced to hourly average concentrations at least once every day, using a minimum of four equally-spaced data points from each one-hour period. The individual average concentrations shall be reduced to units of pounds per hour at least once every week as follows: The measured hourly average concentration from the CEMS shall be multiplied by the flow rate measured during the latest stack test performed in accordance with Special Condition 18 to determine the hourly emission rate.
    - (2) All monitoring data and quality-assurance data shall be maintained by the source. The data from the CEMS may, at the discretion of the TCEQ, be used to determine compliance with the conditions of this permit.
    - (3) The appropriate TCEQ Regional Office shall be notified at least 30 days prior to the initial calibration and validation procedure for the scrubber in order to provide them the opportunity to observe the testing.
  - C. The liquid recycle flow to the scrubber shall be at least equal to the hourly average minimum liquid flow maintained during last satisfactory stack test. The circulation rate for each scrubber shall be monitored and recorded at least once an hour. The scrubber flow monitoring device shall be calibrated using an electronic check or other method approved by the Texas Commission on Environmental Quality (TCEQ) at a frequency in accordance with the manufacturer's specifications, or at least annually, whichever is more frequent, and shall be accurate to within 2 percent of span or 5 percent of the design value.
  - D. Quality assured (or valid) data must be generated when waste gas is routed to a scrubber. Loss of valid data due to periods of monitor breakdown, out-of-control operation (producing inaccurate data), repair, maintenance, or calibration may be exempted provided it does not exceed 5 percent of the time (in hours) that waste gas is routed to a scrubber over the previous rolling 12 month period. The measurements missed shall be estimated using engineering judgment and the methods used recorded.

- E. Caustic of a minimum of 15 weight percent shall be fed to the scrubber when vents are routed to it. The scrubber caustic feed shall be sampled and analyzed for caustic strength daily and the results of the analysis recorded. **(07/15)**

### **Storage Tank**

- 25. Tank V-122 (EPN OC4ST122) and V-905 (OC4ST905) are limited to storing the materials identified in the permit application's confidential file dated September 15, 2014.

Uninsulated tank exterior surfaces exposed to the sun shall be white or aluminum. Storage tanks must be equipped with permanent submerged fill pipes.

The permit holder shall maintain an emissions record which includes calculated emissions from Tank V-122 and Tank V-905 during the previous calendar month and the past consecutive 12-month period.

### **Additional Recordkeeping Requirements**

- 26. The following records shall be kept at the plant in a form suitable for inspection for the life of the permit. All records required in this permit shall be made immediately available upon request to representatives of the TCEQ, EPA, or any air pollution control agency with jurisdiction: **(07/15)**
  - A. Permit application dated January 26, 2012, July 23, 2012, September 15, 2014 and subsequent representations submitted to TCEQ.
  - B. A complete copy of testing reports and records of the initial performance testing for:
    - (1) heaters completed pursuant to Special Condition Nos. 15 and 16 and,
    - (2) scrubbers completed pursuant to Special Condition Nos. 17 and 18, to demonstrate initial compliance.
  - C. Stack sampling results or other air emissions testing (other than CEMS data) that may be conducted on units authorized under this permit after the date of 2012 permit issuance.
- 27. The following information shall be recorded and maintained at the plant site in a form suitable for inspection for a five-year rolling basis and shall be made immediately available upon request to representatives of the TCEQ, EPA or any air pollution control agency with jurisdiction: **(07/15)**
  - A. Monthly records of production rate for propylene and by-products as required by Special Condition No.3.
  - B. Records for Leak Detection and Repair programs as required by Special Condition 7 for Hydrogen Chloride (HCl) and Chlorine (Cl<sub>2</sub>) service components:
    - (1) The date and time of each inspection

- (2) Records of repairs and replacements due to leaks
  - (3) Records of physical inspections
- C. Records for Leak Detection and Repair programs as required by Special Condition 8 for VOC service components:
  - (1) Low vapor pressure and vacuum service equipment exempted from instrument monitoring, and difficult-to-monitor and unsafe-to-monitor valves identification.
  - (2) Monitoring and maintenance program observations, measurements, instrument calibrations, component repair results, and delay of repair rationale and potential emission rate
  - (3) Alternate monitoring frequency data justification
  - (4) Open-ended valve or line date and time
  - (5) Physical inspections
- D. Records of the total sulfur concentration of fuels for the heaters as required by Special Condition No. 10.
- E. Records of fuel flow to the heaters as required in Special Condition No. 11 as follows;
  - (1) Fifteen minute and hourly average fuel composition, flow rates and heating value in MMBtu/hr [HHV]
  - (2) Fuel flow monitor downtime and a 12 month rolling average of the operational time
- F. Records of the average hourly firing rate (in MMBtu/hr, HHV) for each heater [EPNs OC4H310, OC4H320, OC4H330, OC4H340] as required in Special Condition 12.
- G. Records of monitoring data for each heater [EPNs OC4H310, OC4H320, OC4H330, OC4H340] as required in Special Condition No.19 as follows:
  - (1) Hourly average concentrations of NO<sub>x</sub>, CO and diluent gases
  - (2) Hourly average emissions of NO<sub>x</sub>, expressed as lbs/MMBtu (HHV)
  - (3) Hourly average emissions of NO<sub>x</sub>, expressed in lbs/hr
  - (4) Hourly average concentration of CO (ppmvd) at 3% O<sub>2</sub>
  - (5) Hourly average emissions of CO, expressed in lbs/hr
  - (6) Rolling 12 month emissions of NO<sub>x</sub> expressed as lbs/MMBtu (HHV) (pursuant to Special Condition 13)
  - (7) CEMS analyzer maintenance and calibration
  - (8) CEMS quarterly CGAs
  - (9) CEMS downtime and a 12 month average of the operational time

- H. Records of monitoring data for each flare [EPNs OC4F9551, OC4F9552, OC4F956, OC4F957] as required in Special Condition 20 as follows:
  - (1) Continuous flare monitoring
  - (2) 15 minute and hourly average values of vent stream flow and composition to the flares
  - (3) If a calorimeter is used, the net heating value of the vent stream in Btu/scf
  - (4) 15 minute values of flared gas net heating value and actual exit velocity
  - (5) Hourly and mass emission rates from the flares
  - (6) Analyzer maintenance, calibration and instrument accuracy determination and data
  - (7) Analyzer downtime and a 12 month average of the operational time
- I. Records for the vent gas capture system as required in Special Condition 21 as follows:
  - (1) Monthly AVO inspections and results or annual Method 21 monitoring and results of the vent gas capture system
  - (2) Continuous monitoring of flow as measured by a flow indicator downstream of all by-pass valves or monthly verification of valve position and car seal condition (applies only if a by-pass is present on the vent gas capture system.
- J. Records for Cooling Tower (EPN OC4CT900) as required in Special Conditions No. 22 and 23 as follows:
  - (1) Records of all inspections and repairs to the cooling tower drift eliminators per SC 23.A.
  - (2) Records of sampling results for total dissolved solids (TDS) and/or conductivity per SC 23.B.
  - (3) Records of the calculated TDS-to-conductivity correlation factor including the TDS-to-conductivity ratios per SC 23.B.
  - (4) Records of instrument calibration, test results, and process measurements used for the emission calculations (for particulate matter emissions) per SC 23.C.(4).
  - (5) Rolling 12 month emissions of particulate matter.
  - (6) Results of monthly VOC monitoring, continuous HRVOC monitoring, cooling water flow rate, and maintenance activities on the cooling water system per SC 22.A.
  - (7) Hourly and rolling 12-month VOC emission data.
- K. Records for the Vent Scrubber T-485 (EPN OC4SV485) required by Special Condition 24 as follows:
  - (1) Hourly average concentrations of hydrogen chloride, chlorine, and sulfur dioxide in the scrubber exhaust

- (2) Hourly average circulation rate of liquid flow into the scrubber
  - (3) Flow monitoring device calibration verification
  - (4) Scrubber CEMS downtime and a 12-month average of operational time
  - (5) Analysis results of the scrubber caustic feed strength.
- L. Records of monthly storage tank emissions for Tank V-122 and Tank V-905, including a 12 month rolling total of emissions for each tank as required in Special Condition No. 25.

### **Reporting**

28. The holder of this permit shall comply with the reporting and record keeping requirements of 40CFR §60.7. Such reports are required for each emission unit which is required to be continuously monitored. Each report shall contain the hours of operation of the facility, a report summary of the periods of non-complying emissions, and CEMS downtimes by cause, in addition to the information specified in 40 CFR § 60.7.

### **Maintenance, Startup and Shutdown**

29. This permit authorizes the emissions from the planned maintenance, startup, and shutdown (MSS) activities summarized in the MSS Activity Summary (Attachment C) attached to this permit. **(07/15)**

Attachment A identifies the inherently low emitting MSS activities that may be performed at the plant. Emissions from activities identified in Attachment A shall be considered to be equal to the potential to emit represented in the permit application. The estimated emissions from the activities listed in Attachment A must be revalidated annually. This revalidation shall consist of the estimated emissions for each type of activity and the basis for that emission estimate.

Routine maintenance activities, as identified in Attachment B may be tracked through the work orders or equivalent. Emissions from activities identified in Attachment B shall be calculated using the number of work orders or equivalent that month and the emissions associated with that activity identified in the permit application.

The performance of each planned MSS activity not identified in Attachments A or B and the emissions associated with it shall be recorded and include at least the following information:

- A. the process unit at which emissions from the MSS activity occurred, including the emission point number and common name of the process unit;
- B. the type of planned MSS activity and the reason for the planned activity;
- C. the common name and the facility identification number, if applicable, of the facilities at which the MSS activity and emissions occurred;

- D. the date and time of the MSS activity and its duration;
- E. the estimated quantity of each air contaminant, or mixture of air contaminants, emitted with the data and methods used to determine it. The emissions shall be estimated using the methods identified in the permit application, consistent with good engineering practice.

All MSS emissions shall be summed monthly and the rolling 12-month emissions shall be updated on a monthly basis.

30. Process units and facilities, with the exception of those identified in Attachment A shall be depressurized, emptied, degassed, and placed in service in accordance with the following requirements: **(07/15)**

- A. The process equipment shall be depressurized to a control device or a controlled recovery system prior to venting to atmosphere, degassing, or draining liquid. Equipment that only contains material that is liquid with VOC partial pressure less than 0.50 psi at the normal process temperature and 95°F may be opened to atmosphere and drained in accordance with paragraph C of this special condition. The vapor pressure at 95°F may be used if the actual temperature of the liquid is verified to be less than 95°F and the temperature is recorded.
- B. If mixed phase materials must be removed from process equipment, the cleared material shall be routed to a knockout drum or equivalent to allow for managed initial phase separation. If the VOC partial pressure is greater than 0.50 psi at either the normal process temperature or 95°F, any vents in the system must be routed to a control device or a controlled recovery system. The vapor pressure at 95°F may be used if the actual temperature of the liquid is verified to be less than 95°F and the temperature is recorded. Control must remain in place until degassing has been completed or the system is no longer vented to atmosphere.
- C. All liquids from process equipment or storage vessels must be removed to the maximum extent practical prior to opening equipment to commence degassing and/or maintenance. Liquids must be drained into a closed vessel or closed liquid recovery system unless prevented by the physical configuration of the equipment. If it is necessary to drain liquid into an open pan or sump, the liquid must be covered or transferred to a covered vessel within one hour of being drained.
- D. If the VOC partial pressure is greater than 0.50 psi at the normal process temperature or 95°F, facilities shall be degassed using good engineering practice to ensure air contaminants are removed from the system through the control device or controlled recovery system to the extent allowed by process equipment or storage vessel design. The vapor pressure at 95°F may be used if the actual temperature of the liquid is verified to be less than 95°F and the temperature is recorded. The facilities to be degassed shall not be vented directly to atmosphere, except as necessary to establish isolation of the work area or to monitor VOC concentration following controlled depressurization. The venting shall be minimized to the maximum extent practicable and actions taken recorded. The control device or recovery system utilized shall be recorded with the estimated emissions from

controlled and uncontrolled degassing calculated using the methods that were used to determine allowable emissions for the permit application.

- (1) For MSS activities identified in Attachment B, the following option may be used in lieu of (2) below. The facilities being prepared for maintenance shall not be vented directly to atmosphere until the VOC concentration has been verified to be less than 10 percent of the lower explosive limit (LEL) per the site safety procedures.
- (2) The locations and/or identifiers where the purge gas or steam enters the process equipment or storage vessel and the exit points for the exhaust gases shall be recorded (process flow diagrams [PFDs] or piping and instrumentation diagrams [P&IDs] may be used to demonstrate compliance with the requirement). If the process equipment is purged with a gas, two system volumes of purge gas must have passed through the control device or controlled recovery system before the vent stream may be sampled to verify acceptable VOC concentration prior to uncontrolled venting. The VOC sampling and analysis shall be performed using an instrument meeting the requirements of Special Condition 31. The sampling point shall be upstream of the inlet to the control device or controlled recovery system. The sample ports and the collection system must be designed and operated such that there is no air leakage into the sample probe or the collection system downstream of the process equipment or vessel being purged. If there is not a connection (such as a sample, vent, or drain valve) available from which a representative sample may be obtained, a sample may be taken upon entry into the system after degassing has been completed. The sample shall be taken from inside the vessel so as to minimize any air or dilution from the entry point. The facilities shall be degassed to a control device or controlled recovery system until the VOC concentration is less than 10,000 ppmv or 10 percent of the LEL. Documented site procedures used to de-inventory equipment to a control device for safety purposes (i.e., hot work or vessel entry procedures) that achieve at least the same level of purging may be used in lieu of the above.

E. Gases and vapors with VOC partial pressure greater than 0.50 psi may be vented directly to atmosphere if all the following criteria are met:

- (1) It is not technically practicable to depressurize or degas, as applicable, into the process.
- (2) There is not an available connection to a plant control system (flare).
- (3) There is no more than 50 lbs of air contaminant to be vented to atmosphere during shutdown or startup, as applicable.

All instances of venting directly to atmosphere per Part E of this condition must be documented when occurring as part of any MSS activity. The emissions associated with venting without control must be included in the work order or equivalent for those planned MSS activities identified in Attachment B.



- F. When venting dimethyl disulfide (DMDS) during MSS, the frequency of each equipment opening for Equipment D-133 (top), D-133 (bottom), D-135, FL-134, D-360 and D-361 is limited to 2 times per year, with controlled DMDS venting occurring within one hour for each opening. Only one vessel shall be opened at a time. Inspection and maintenance on each vessel may start after the residual VOC (DMDS) remaining in the equipment is below 10,000 ppmv for equipment opening of D-133(top), D-133(bottom) and D-135 and, below 3,000 ppmv for equipment opening of D-360 and D-361. The DMDS emissions from EPN OC4MEFU2 due to the opening of all six equipment separately shall not exceed a total of 12 times per year.
31. Air contaminant concentration shall be measured using an instrument/detector meeting one set of requirements specified below. **(07/15)**
- A. VOC concentration shall be measured using an instrument meeting all the requirements specified in EPA Method 21 (40 CFR 60, Appendix A) with the following exceptions:
- (1) The instrument shall be calibrated within 24 hours of use with a calibration gas such that the response factor (RF) of the VOC (or mixture of VOCs) to be monitored shall be less than 2.0. The calibration gas and the gas to be measured, and its approximate (RF) shall be recorded.
- If the RF of the VOC (or mixture of VOCs) to be monitored is greater than 2.0, the VOC concentration shall be determined as follows:
- $$\text{VOC Concentration} = \text{Concentration as read from the instrument} \times \text{RF}$$
- In no case should a calibration gas be used such that the RF of the VOC (or mixture of VOCs) to be monitored is greater than 5.0.
- (2) Sampling shall be performed as directed by this permit in lieu of section 8.3 of Method 21. During sampling, data recording shall not begin until after two times the instrument response time. The date and time shall be recorded, and VOC concentration shall be monitored for at least 5 minutes, recording VOC concentration each minute. As an alternative, the VOC concentration may be monitored over a five-minute period with an instrument designed to continuously measure concentration and record the highest concentration read. The highest measured VOC concentration shall be recorded and shall not exceed the specified VOC concentration limit prior to uncontrolled venting.
- B. Colorimetric gas detector tubes may be used to determine air contaminant concentrations if they are used in accordance with the following requirements:
- (1) The air contaminant concentration measured as defined in (3) is less than 80 percent of the range of the tube and is at least 20 percent of the maximum range of the tube.
- (2) The tube is used in accordance with the manufacturer's guidelines.

- (3) At least 2 samples taken at least 5 minutes apart must satisfy the following prior to uncontrolled venting:

measured contaminant concentration (ppmv) < release concentration.

Where the release concentration is:

10,000\* mole fraction of the total air contaminants present that can be detected by the tube.

The mole fraction may be estimated based on process knowledge. The release concentration and basis for its determination shall be recorded.

Records shall be maintained of the tube type, range, measured concentrations, and time the samples were taken.

C. Lower explosive limit measured with a lower explosive limit detector.

- (1) The detector shall be calibrated within 30 days of use with a certified pentane gas standard at 25% of the lower explosive limit (LEL) for pentane. Records of the calibration date/time and calibration result (pass/fail) shall be maintained.
- (2) A functionality test shall be performed on each detector within 24 hours of use with a certified gas standard at 25% of the LEL for pentane. The LEL monitor shall read no lower than 90% of the calibration gas certified value. Records, including the date/time and test results, shall be maintained.
- (3) A certified methane gas standard equivalent to 25% of the LEL for pentane may be used for calibration and functionality tests provided that the LEL response is within 95% of that for pentane.

32. The following requirements apply to vacuum and air mover truck operations to support planned MSS at this site: **(07/15)**

- A. Prior to initial use, identify any liquid in the truck. Record the liquid level and document the VOC partial pressure. After each liquid transfer, identify the liquid, the volume transferred, and its VOC partial pressure.
- B. If vacuum pumps or blowers are operated when liquid is in or being transferred to the truck, the following requirements apply:
  - (1) If the VOC partial pressure of the liquid in or being transferred to the truck is greater than 0.50 psi at 95°F, the vacuum/blower exhaust shall be routed to a control device or a controlled recovery system.
  - (2) Equip fill line intake with a “duckbill” or equivalent attachment if the hose end cannot be submerged in the liquid being collected.
  - (3) A daily record containing the information identified below is required for each vacuum truck in operation at the site each day.
    - (a) For each liquid transfer made with the vacuum operating, record the duration of any periods when air may have been entrained with the liquid transfer. The reason for operating in this manner and whether a

“duckbill” or equivalent was used shall be recorded. Short, incidental periods, such as those necessary to walk from the truck to the fill line intake, do not need to be documented.

- (b) If the vacuum truck exhaust is controlled with a control device other than an engine or oxidizer, VOC exhaust concentration upon commencing each transfer, at the end of each transfer, and at least every hour during each transfer shall be recorded, measured using an instrument meeting the requirements of Special Condition 31A or B.
  - C. Record the volume in the vacuum truck at the end of the day, or the volume unloaded, as applicable.
  - D. The permit holder shall determine the vacuum truck emissions each month using the daily vacuum truck records and the calculation methods utilized in the permit application. If records of the volume of liquid transferred for each pick-up are not maintained, the emissions shall be determined using the physical properties of the liquid vacuumed with the greatest potential emissions. Rolling 12 month vacuum truck emissions shall also be determined on a monthly basis.
  - E. If the VOC partial pressure of all the liquids vacuumed into the truck is less than 0.10 psi, this shall be recorded when the truck is unloaded or leaves the plant site and the emissions may be estimated as the maximum potential to emit for a truck in that service as documented in the permit application. The recordkeeping requirements in A through D of this condition do not apply.
33. Additional occurrences of MSS activities authorized by this permit in the Attachment C may be authorized under permit by rule only if conducted in compliance with this permit’s procedures, emission controls, monitoring, and recordkeeping requirements applicable to the activity. **(07/15)**
34. Control devices required by this permit for abatement of emissions from planned MSS activities are limited to Merox Elevated Flare FS-956 (EPN OC4F956) and Multi Point Ground Flare (EPN OC4F9552) [Multi Point Ground Flare authorized by TCEQ via Alternative Method of Control (AMOC) (AMOC Project No. 197013) and by EPA via Alternate Means of Emission Limitations (AMEL)]. **(07/15)**

The flare systems are subject to the following requirements:

- A. The Multi Point Ground Flare shall be designed and operated such that the combined assist natural gas and waste stream to the flare meets the AMOC’s and AMEL’s specifications of minimum heating value and maximum tip velocity, whichever are more stringent, during the MSS operations authorized by this permit.
- B. The Multi Point Ground Flare shall meet the requirements of Special Condition 20B through 20E and the MEROX Elevated Flare shall meet all requirements of Special Condition No. 20 during the MSS operations.

35. Controlled recovery systems identified in this permit shall be directed to an operating process or to a collection system that is vented through the Multi Point Flare meeting the requirements of the Special Condition No. 34. **(07/15)**
36. Planned maintenance activities must be conducted in a manner consistent with good practice for minimizing emissions, including the use of air pollution control equipment, practices and processes. All reasonable and practical efforts to comply with Special Conditions 29 through 35 must be used when conducting the planned maintenance activity, until the commission determines that the efforts are unreasonable or impractical, or that the activity is an unplanned maintenance activity. **(07/15)**

Dated July 10, 2015

Permit 100787 and PSDTX1314M1

Attachment A

**Inherently Low Emitting Activities**

Activity*	Emissions				
	VOC	NOx	CO	PM	H <sub>2</sub> S/SO <sub>2</sub>
Instrumentation and analyzer maintenance	X				
Relief device maintenance	X				
Replacement of analyzer filters and screens	X				
Sample station venting	X				

\*The maintenance activities listed above are high in frequency and low emitting in nature. These maintenance activities are part of routine operations and are not managed through a work order or similar tracking system. Estimated emissions from these activities are represented at EPN OC4MEFU2 under the source name "Attachment A MSS" on MAERT.

Dated July 10, 2015

Permit 100787 and PSDTX1314M1

Attachment B

**Routine Maintenance Activities**

<b>Activity*</b>
Line breaks, small piping ( $\leq 0.04$ ft <sup>3</sup> physical internal volume)
Line breaks, large piping ( $\leq 0.39$ ft <sup>3</sup> physical internal volume)
Pipe opening ( $\leq 8.73$ ft <sup>3</sup> physical internal volume)
Pump opening ( $\leq 15$ ft <sup>3</sup> physical internal volume)
Compressor opening ( $\leq 50$ ft <sup>3</sup> physical internal volume)

\* The planned maintenance activities in the above table are for isolated piping and equipment that has been de-pressured and purged to the process. These are activities associated with routine maintenance of the plant, are high frequency, and low emitting in nature. These maintenance activities are part of routine operations and shall be managed through work orders or similar tracking system. Estimated emissions from these Attachment B activities are represented at EPN OC4MEFU2 under the source name "Equipment Opening MSS" on MAERT.

Dated July 10, 2015

Permit 100787 and PSDTX1314M1

Attachment C

**MSS Summary**

<b>Facilities</b>	<b>Description</b>	<b>Emissions Activity</b>	<b>EPN</b>
All process vessels, exchangers, and towers in PDH-1 facility	Clearing/degassing for opening in preparation for planned maintenance	Clearing/degassing to pressure-assisted flare	OC4F9552 OC4F956
All process vessels, exchangers, and towers in PDH-1 facility	Vessel and Equipment opening after clearing/degassing	Venting to atmosphere	OC4MEFU2
All process vessels, exchangers, towers, compressors, pumps, and piping	Unit startup	Venting to pressure-assisted multi point ground flare	OC4F9552
All process vessels, exchangers, towers, compressors, pumps, and piping	Unit shutdown	Vent to pressure-assisted multi point ground flare	OC4F9552
All process vessels	Catalyst replacement	Venting to atmosphere	OC4MED470
Instrument, analyzer, relief device, filter MSS and sample station venting	Miscellaneous low emitting activities	see Attachment A	OC4MEFU2
Isolated piping and equipment	Piping and equipment opening activities	See Attachment B	OC4MEFU2

Dated July 10, 2015

## Emission Sources - Maximum Allowable Emission Rates

Permit Numbers 100787 and PSDTX 1314M1

This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum rates allowed for these facilities, sources, and related activities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

### Air Contaminants Data

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
OC4H310	PDH-1HeaterH-310	NOx	13.80	
		CO	8.95	
		SO2	3.27	
		PM	1.15	
		PM10	1.15	
		PM2.5	1.15	
		VOC (6)	1.56	
		Ethylene	0.63	
		Propylene	0.35	
OC4H320	PDH-1 Heater H-320	NOx	13.80	
		CO	8.95	
		SO2	3.27	
		PM	1.15	
		PM10	1.15	
		PM2.5	1.15	
		VOC (6)	1.56	
		Ethylene	0.63	
		Propylene	0.35	



## Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
OC4H330	PDH-1 Heater H-330	NOx	13.80	
		CO	8.95	
		SO <sub>2</sub>	3.27	
		PM	1.15	
		PM <sub>10</sub>	1.15	
		PM <sub>2.5</sub>	1.15	
		VOC (6)	1.56	
		Ethylene	0.63	
		Propylene	0.35	
OC4H340	PDH-1 Heater H-340	NOx	13.80	
		CO	8.95	
		SO <sub>2</sub>	3.27	
		PM	1.15	
		PM <sub>10</sub>	1.15	
		PM <sub>2.5</sub>	1.15	
		VOC (6)	1.56	
		Ethylene	0.63	
		Propylene	0.35	
OC4MEH310	Low Firing Mode (MSS)	CO (7)	45.74	
OC4MEH320	Low Firing Mode (MSS)	CO (7)	45.74	
OC4MEH330	Low Firing Mode (MSS)	CO (7)	45.74	
OC4MEH340	Low Firing Mode (MSS)	CO (7)	45.74	

## Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
OC4H310 OC4H320 OC4H330 OC4H340	PDH-1 Heater H-310 PDH-1 Heater H-320 PDH-1 Heater H-330 PDH-1 Heater H-340	NOx		152.21
		CO		118.40
		SO2		1.73
		PM		15.22
		PM10		15.22
		PM2.5		15.22
		VOC (6)		20.64
		Ethylene		8.32
		Propylene		4.66
OC4F9551	Multi-Point Ground Flare FX-955 (Routine)	CO	24.88	
		NOx	3.63	
		VOC (6)	25.80	
		Ethylene	0.12	
		Propylene	8.36	
		SO2	0.38	
OC4F9552	Multi-Point Ground Flare FX-955 (MSS) (8)	CO	1415.64	
		NOx	709.10	
		VOC (6)	1280.27	
		Ethylene	90.08	
		Propylene	435.21	
		SO2	40.00	
OC4F956	Merox Elevated Flare FS-956	CO	1.04	
		NOx	0.12	
		VOC (6)	0.01	
		SO2	0.03	

## Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
OC4F956	Merox Elevated Flare FS-956 (MSS)	CO	31.42	
		NOx	3.66	
		VOC (6)	0.16	
		Ethylene	0.05	
		Propylene	0.06	
		SO2	0.11	
OC4F957	Low Pressure Flare FS-957	CO	0.68	
		NOx	0.13	
		VOC (6)	0.21	
		Ethylene	0.01	
		Propylene	0.15	
		SO2	0.03	
OC4F9551 OC4F956 OC4F957 OC4F9552	Flare Annual Source Cap	CO	-	85.10
		NOx	-	23.38
		VOC (6)	-	40.21
		Ethylene	-	0.36
		Propylene	-	14.39
		SO2	-	0.91
OC4CT900	Cooling Tower CT-900	VOC (6)	1.88	8.22
		Ethylene	0.06	0.25
		Propylene	1.86	8.14
		PM	0.50	2.20
		PM10	0.27	1.19
		PM2.5	0.27	1.19
OC4FU2	PDH-1 Fugitives	VOC (6)	2.61	11.26
		Ethylene	0.04	0.16
		Propylene	0.77	3.35
		HCl	0.01	0.05
		CL2	0.06	0.27

## Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
OC4SV485	CCR Vent Scrubber T-485	CO	1.82	7.95
		NOx	0.15	0.65
		HCl	0.12	0.52
		SO2	0.21	0.91
		Cl2	0.23	0.99
OC4DL460	Catalyst Fines Drum Loading, D-460	PM	1.82	0.17
OC4O470	Catalyst Addition Drum Hopper, D-470	PM	1.82	0.17
OC4ST122	Storage Tank V-122 Vent	VOC (6)	0.03	0.01
OC4ST905	HCl Storage Tank V-905	HCl	0.01	0.01
OC4GE860	Backup Generator DG-860	CO	0.40	0.02
		NOx	3.27	0.16
		SO2	0.01	0.01
		PM	0.09	0.01
		PM10	0.09	0.01
		PM2.5	0.09	0.01
		VOC	0.11	0.01
OC4MED470	Catalyst Replacement (MSS)	PM	44.19	9.54
OC4MEFP310	H-310 Fuel Purge (MSS)	VOC	0.01	0.01
OC4MEFP320	H-320 Fuel Purge (MSS)	VOC	0.01	0.01
OC4MEFP330	H-330 Fuel Purge (MSS)	VOC	0.01	0.01
OC4MEFP340	H-340 Fuel Purge (MSS)	VOC	0.01	0.01
OC4MEFU2	Equipment Opening Fugitives (MSS)	VOC	723.02	0.99
	Attachment A Activities (MSS)	VOC	4.71	0.39

Emission Sources - Maximum Allowable Emission Rates

- (1) Emission point identification - either specific equipment designation or emission point number from plot plan.
- (2) Specific point source name. For fugitive sources, use area name or fugitive source name.
- (3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
  - NO<sub>x</sub> - total oxides of nitrogen
  - SO<sub>2</sub> - sulfur dioxide
  - H<sub>2</sub>S - hydrogen sulfide
  - PM - total particulate matter, suspended in the atmosphere, including PM<sub>10</sub> and PM<sub>2.5</sub>, as represented
  - PM<sub>10</sub> - total particulate matter equal to or less than 10 microns in diameter, including PM<sub>2.5</sub>, as represented
  - PM<sub>2.5</sub> - particulate matter equal to or less than 2.5 microns in diameter
  - CO - carbon monoxide
  - HCl - hydrogen chloride
  - Cl<sub>2</sub> - chlorine
- (4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
- (5) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.
- (6) VOC includes speciated ethylene and propylene emissions.
- (7) Annual emission rates for the low firing mode (MSS) are included in the routine heater emission cap of 118.40 tpy CO.
- (8) Startup and Shutdown activities for the Multipoint Ground Flare do not occur simultaneously, therefore, the hourly emission rate is based on the maximum emissions from the Startup and Shutdown scenarios. The annual emissions are the sum of the Startup and Shutdown scenario emissions.

Date: July 10, 2015